Dave Bright – List of Inventions, Methodologies, and Thought Experiments
As of Friday June 7th, 2024
Born April 7, 1955, London Ontario

Editing check link completed to xxx

My WordPress site is davebright55.com and the home page is currently used for advertising an apartment rental, and for samples of my renovation work, so I can paste this site into FB Messenger inquires and direct people directly to my own content out of the fingers of Meta! I am also working on sub-sections for my ideas and inventions but keep this out of my home page and send the sub-link separately to selected people.

Some of these inventions have actually been created, and ALL software which I wrote in my career will likely be gone. The vinyl record cleaning machine idea has been brought back to life due to a nostalgia driven resurgence of LP records. Many are just ideas, most not even "half baked", some further along than others.

This document is a prototype/work in progress and is being sent to a few friends for technical feedback. The MS Word Automatic Table of Contents creates CLICKABLE SECTIONS you can jump to. When I save as a PDF, the clickability disappears, perhaps an HTML format would work for others?

My intention is to use social media to share some specific ideas with special interest groups, perhaps starting with forums.

My WordPress site was created for advertising apartment rentals, and sharing other ideas, and the paid version means the reader does not get ads about tonail fungus (I hope).

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Current Top Interests: Green Energy, Vaccines, Internet

I currently have a few items that I am passionate about where publishing them could help others in the process to create new and improved things: Current focus at the top are four interest, with Fission Reactors and Uranium at the top since it is the best solution we have NOW to "turn the rising tide" from global

warming. None of the hype about forest fires and desertification etc. are as important as stopping ocean level rising, and solar panels or wind turbines will not likely be enough to make a dent in CO2 based on current projected and uncontrolled use by China and India.

2010 – Increase Fission Reactors (Uranium)

- More Uranium and Fission plants NOW.
    - I think it is TOO LATE to stop ocean levels from rising at least 3 feet, where and when NOBODY will be denying global warming. So my opinion is to start "PLAN B" now, which is to create incentives to not build in low areas and start figuring how to salvage and or relocate Miami etc…
    - All of the nuclear waste can be fit into an area the size of how many football fields? It will be a regretful memory if NO MORE NUKE REACTOR demonstrations resulted in cities underwater, all because protesters prevented storage in a remote desert or something.
- A huge source of carbon free energy which can be quickly expanded with existing technology
    - I have been saying this since Al Gore's Convenient Truth and the first alarming CO2 graphs (in 1985?)
    - Only in 2023 have the politicians finally started what I am calling the "BIG U-238 TURN"
- Athabasca Basin in Saskatchewan is #2 source of U3O8 in the world.
- Cameco Company CCO.TO stock is doing well. CanAlaska CVV.V are the only guys in Athabasca doing directional drilling and multi-branching holes using mud-pumped turbine drills. Good results lately. Sold both and bought Denison Mines DNN also out there…See Yahoo Finance key in a stock and read up on the news for each.
- PLANS
    - Create some links to good sources: the number of plants per country, the total energy need for the planet, etc.
    - See our world in data under energy https://ourworldindata.org/energy

2010 – Commercial Electricality from Fusion by 2035

- currently over 30 projects worldwide - General Fusion in British Columbia was #2 in 2003. https://generalfusion.com/
- Research then write up simple explanations of each and publish this on WordPress site, send out some links in X and FB etc
- how to get ANY of them to allow the little guys to invest before they go public. I tried investing in General Fusion in 2016 but they said no unless it was over 1 million dollars.
- Explain fusion in simple terms, how it works in the Sun (yes its hydrogen to helium, no its useless to us because we can't compress liquid hydrogen even 1 percent let alone by a factor of 60+
- See pdf History of fusion research projects and links to lists. Copy text out of 2023 report
- May 2024: LPPFusion Eric Lerner is one of them, possible to invest in this one, see youtube channel 158 videos
- ChatGPT try to use to gather stats and info

1988 – Immune System, Antibodies, 2022 Need Safe Vaccines

- This is just an abstract…I have about 50 pages written up on this but am putting it on the back burner until I get my Fission and Fusion sections working to a reasonable level of detail.
- 2022 how to make safe vaccines: getting custom-tailored antigens into the bloodstream directly in order to induce B-Cell antibody response without any further side-affects than would be encountered by the natural encountering of a virus (i.e. a safe spike protein exactly the same as with a natural virus)

- April 5, 2021 first Moderna Covid shot, May 7, 2021 second shot, December 27, 2021 – got my third shot, tingling running down my arm immediately, I think they hit a vein or artery as a result of not "aspirating the needle to check for blood". Problems with my right eye followed a few hours later, severe headaches for three weeks….more to this story.
- The big problem is: about 95% or more of the public has almost ZERO understanding of this level of science, and with any single case problem from a vaccine can trigger an emotional reaction with a reader and a lot of negative feedback. For this reason, my efforts in this area will be a total waste of time until I have enough material to cover the whole picture I wish to describe.
- I have a reasonable understanding of the science of how life works…the 3 billion base pairs in the human DNA, how cells divide, how ribosomes create protein, and how B cells are created in the bone marrow and end up in the blood stream with hundreds of millions of permutations and combinations of antibodies, and how these in turn work in a natural immune response. Before you know and can recite how this works, you have absolutely no backing to make claims about vaccines being bad. All you are doing is reiterating and propagating a lot of politically charged rhetoric, conspiracy theories, and emotional word salads. Many experts like Dr John Cambell are providing valuable information, but I want to provide some simple scientific explanations for a deeper understanding. The greatest roadblock to sharing scientific thinking is that perhaps 95% of people do not have an attention span of more than one minute, unless you present the information in a captivating and entertaining way, in order to compete with FaceBook and Instagram reels like dogs on trampolines, and this is only getting worse with cell phone and social media addiction.
- I will be showing within a naturally occurring viral infection, the actual composition of blood, how many cells of each type there are, their dimensions, including diameter of capillaries, the relative size of antibodies, and how many viruses a full blown infection results in, and how many antibodies are required to shut down the infection, basically one of my "do the math" explanations. It takes about 5 days for your B cells to proliferate with daughter cells, which each will crank out about 10,000 antibodies per hour, each perfect clones at 150 kilodaltons in molecular size (that is 150,000 hydrogen atoms, or say 20 thousand molecules made up hydrogen, carbon, oxygen, nitrogen etc (see molecule builder invention)
- See recent link on phone: how many different blood tests there are.
- In 1988 I was diagnosed with Hashimoto's Thyroiditis. I had lost 30 pounds in about 8 weeks, and my heart rate, normally 45 to 55, was over 100 even when sleeping! Its called a thyroid storm, and it is when your antibodies for some reason start attacking your thyroid tissue, and your T3 T4 and TSH are all thrown completely out of whack, my eyes were bulging, and my mood swung wildly. While working on a programming contract at T J Liptons, another consultant who had had the same problem recognized it. Long story short, after drinking the radioactive I131 to wipe out part of my thyroid, I began studying the immune system and antibodies. See Scientific American Oct 1986?
- My nephew helped build a vaccine plant that uses eggs as a medium to grow viruses, which are then broken down into safe small particles that will induce an immune response. It is the additional chemicals and adjuvants, aluminum etc. that are added to improve efficacy that can create the problems. Another Canadian company is using a relative of the tobacco plant that is genetically modified (YES a GMO), to create antigens which can be extracted and used to inject directly into the blood.

2000xxx – WWW Internet HTML search, content, authoring, curating

- Using the Internet, existing tech, AI (had ChatGBT for a year, still no time), and some of my own inventions/ideas for more efficient learning for me and others (Teaching and Sharing, Learning and Research)
    - Xxx see

2024 – Purposes of this Inventions Document

- I started this invention list doc in around 2010

- Publish my ideas so they may help others. A common thread to all of my articles…**KEEP IT SIMPLE** a version for public school grads one for high school grads, with links to further higher level scientific papers. And **DO THE MATH**: Rather than just throw out quick blogs containing non-science and word salad, actually do the math necessary to allow others to see the truth about non-science and conspiracy theories. (most of this is not MATH but really just simple arithmetic.
- Number one is that it helps me with the creative process. By being able to quickly scan all of my lifetime creative ideas, it stimulates new ideas, plus allows me to stop thinking of all of them and focus on one at time.
- At least the digital packrat part of me does not take up any physical space in the office, garage, basement or attic!
- "working notes to myself which I share with anyone else who may also be interested"
- ARCHIVAL: As a reminiscing of my past, and to provide some kind of archive of my life in the same way my grandfather Denny Bright did with 7 red binders in his "Family Archives".
- Discipline of Discretionary Time: Currently spending an hour or two each morning on this and/or investing, and my daily to do list (see section on how this is used). Need to get to sleep early, 9pm, up at 5am, ready to get out the door by 8am day light!
    - Jan 31, 2024 currently finishing up a vinyl floor on a basement renovation that got delayed two full years!
    - Since retiring from the world of computer programming 1980 to 2012, I have completely renovated 3 houses in Goderich, 1900, 1895, and 1870, and lots of other renovations, decks, flooring etc. So not much time to play at the keyboard.
    - Too much wasted on dumb Netflix TV!
- SHARING: By using this document and others, combined with my WordPress site, create a hierarchically organized structure where a reader can quickly navigate with clickable links from my TOTAL SUMMARY level views on things to be described in a language at a Grade 8 level, down to deeper levels, including links to scientific papers which are only partially understood by me.
- Focus: My personality traits seem to include ADHD and OCD, and I am easily distracted and lose focus when going off on creative tangents. By having this "catch all of every good idea I have ever had" laid out, I can quickly jot it down for some other time. This way I can "offload" any conscious or sub-conscious thinking or mental distractions and put them to rest knowing that it can be returned to later and picked up where I left off.
- Income: While there may be money to be made on several of these, I am not concerned with rushing out to get a patent on anything…I currently have enough to live comfortably on...BUT…you never know…

Early Math Lessons, Actual Inventions Built, and Designs Used

1959 – Right Angle Triangles, Meccano, Newton Raftson Method

I was born in 1955, and by the time I had turned 4, my mom had taught me the alphabet and how to read so that I could read the newspaper out loud, and my dad (a pipe organ builder) had taught me add, subtract, multiply and divide, and Pythagoras sum of the squares. They spent a LOT of time with my brother and I on learning and building practical things. It was discovered that I was writing out the numbers from 1 to 1,000 at night under my sheets with a flashlight, and it was a big thrill when the "odometer" clicked over to four digits, but I knew to get to 10,000 would take ten times as long and not worth the effort. Early signs of OCD.

The 3 4 5 and 5 12 13 triangles were being used in building with Meccano, and I could multiply and divide large numbers on paper and pencil including decimals, so I could divide 145.37 into 3,496.25 and get 24.05. Also learned the Newton Rafson method of determining a square root, like for determining the length of a hypostenuse of a triangle with 6 and 11 on the sides…take a guess, divide it in and then add the guess to the answer, divide by two, and repeat. 6*6=36 + 11*11 = 121 or square root of 157

Guess 12.8)157 etc…

1960 – Triangle Numbers Formula and Graphical Proof

This was a discovery I made at the age of 5 when connecting all the dots of a triangle, square, pentagon, hexagon etc. and counting how many lines it took to complete each. I came up with the formula. Add graphic of the drawings and the sequence here…
Age 16 my friend Bill Veenhof and I created the formula for number of spheres in a pyramid of hexagonally close packed spheres.

The formula N squared minus N over Two. Draw 3 dots connect with 3 lines, four dots six lines, five dots ten lines etc. These were fun to draw with just a straight edge.

(redraw my page and add graphic here)

Jan 28, 2021 sent this to mathisfun.com contact us (reply is funmath@gmail.com)
https://socratic.org/questions/how-do-you-find-the-nth-term-of-the-sequence-1-3-6-10-15
https://www.mathsisfun.com/algebra/triangular-numbers.html

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1959/60 – Proof of the Half-Second Clock Gear Train

My dad was rebuilding clocks at age 10, having been inspired by his great great great grandfather Jerome Bright the Clockmaker of Saxmundham, and his son Jerome Denny Bright the watch maker.

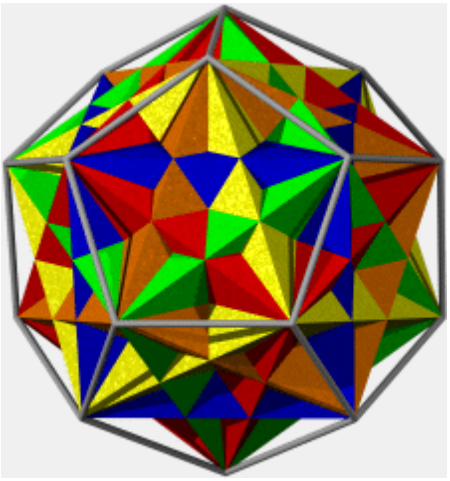
- So it was a natural for him to teach me how to take apart and reassemble a clock movement which had a half-second pendulum. This all happened when I had just turned 5. My mom taught me to read fluently by 4, and by five I was doing long division by hand.
- His explanation of the gear ratios that caused the hour hand at to move $1/12^{th}$ the speed of the minute hand was a revelation in understanding for me, being hands-on, 3D proof. Spinning the minute hand you could see the teeth chugging away and making the hour hand turn. The understanding included the fact that the teeth to all four gears in this part of the train had the same-sized teeth, and by counting the teeth on each, and measuring the diameter of each gear ("pitch diameter"), and some simple arithmetic, you could calculate the gear ratios as well as the

"diametral pitch" of each gear. This lead to the "Boston Gear Catalogue" and the explanation of angled teeth to make smoother running gears, and increasing the pressure angles of 14.5 to 20 degrees also made smoother gears but at a higher wear factor and lateral pressure on the bearings in the shafts, the need for lubricants in transmissions etc. So my dad left me with the clock completely dismantled, and I proceeded to count all of the teeth, and did all the long division to come up with how long it took in minutes and seconds for each gear to turn, and proved that indeed the minute hand took one hour to go around. Then I had to reassemble the clock

- 2024: need to talk to Ian Smith for a half-second clock movement, or do I have one in the attic???. (To redo with grandkids) Also an idea to take apart the JDB watch and JB clock and photograph for a website.

1973 - Geodesic Models – Five Interlocking Cubes etc.

- Sep 1, 2011 - I build this at age 18 along with dozens of other paper models. It got crushed almost beyond recognition by mistake and I finally threw it out this year.



- I have always wanted to build a big one for the science centre in Toronto about 10 feet across. Not sure if I have a photo of my old one, but here is one from the net:
- "Five cubes can be inscribed in a dodecahedron. Ten tetrahedra can be inscribed in the dodecahedra (need to build one), and the volume common to all ten is an icosahedron."

  http://origametry.net/fit.html

  http://ngsm.org/triangulos/Shamballa.htm
  - Amazingly, in a different model, the red and yellow pentagonal / dodecahedron icosahedron model on this site was painted in EXACTLY the same colours as the one I built!
  - Dec 2020, this page is still there

1979 – Pendulograph – Vancouver BC

- pendulographs were a Victorian invention from the 1800's - build replicas.
- I had a really cool one in BC in 1979 but all the drawings were stolen from beneath my nose while reading a paper in a coffee shop, along with all of my other artwork. Two large rocks hanging from wires in the basement of the rental house, the old landlord lady thought I was mad. Two thin wooden sticks at right angles taped to these wires about half way up went to a pen with masking tape. This whole assembly was suspended with an elastic fiber which I harvested from an old pair of underwear. Set this in motion, wait for it to settle in then drop the pen to the paper on a plate below. Oscillation ratio of 6 to 7 was particularly pretty
- Dec 2020…must rebuild it!

- 2024 some artist spinning 5 gallon buckets of multi coloured paint above a 4x8 sheet of paper, similar effects but more dramatic!
- https://drawingmachines.org/category.php?id=35
  - Harmonographs/Pendulographs

2003 – House Front Entrance Our House - Architect used on 100+ houses

Our new house being build for January 2004 in Waterloo Ontario had two stone "cheeks" on either side of the three steps leading up to the front door. The other houses already built had sloping slabs on them, and I told the architect (David Brix) that I did not like them, and they were bad feng shwae, sloping downward, and also would be prone to having gravity sluff them off if and when the mortar gave out.
So I gave him my design for three stepped horizontal sections, which he not only quickly delivered, but adopted on lets say 100+ houses in KW area.
So this pound for pound is my biggest actual invention.
See 2024 street view pic 634 Frieburg Drive Waterloo ON

Hobbies: Software Written, Early Calculators, Windsurfing

Use of Technology: Word, Excel, Google Sheets etc
These are not "unique inventions" but "methods invented" using existing technology

1972 – Royal Digital V Calculator

- The first calculator that I had was a Royal Digital 5 that my dad got, I assume in 1972 at Simpson Sears (in London Mall, the first covered mall in Canada) that had red digits. It was $80 and had no zero suppression, and if you divided a number by zero it went into a conniption fit and sat there blinking and flashing sequences of random numbers at a high speed until you turned it off to reboot.
  http://madrona.ca/e/eec/calcs/RoyalDigitalV.html
- (The first "electronic adding machine" that I ever saw was when my dad's accountant Fred Marshall in London, brought a machine that could add, subtract, multiply, and divide. The digits were a string of glass "nixie tubes" that each had the 10 little digits from zero to nine stacked inside, tiny little fluorescent tubes, only one of which was turned on at a time. These were blue.
  https://mechanicalcalculators.wordpress.com/about/nixie/

1977 – Texas Instruments TI55 Programmable Calculator

- This was my first real "programming" experience. If I recall correctly, you could program up to 32 key strokes in and save this. Then you could enter a value into the calculator and press 2nd RunStop and the calculator would execute the pre-programmed instructions. I was still 5 years away from having a Franklin Ace Apple II Clone computer, so this was magic.
  http://www.arithmomuseum.com/album.php?cat=c&id=429&lang=en

1978 – Sub-Stellar coordinates of the 57 navigation Stars

- I had a printed "nautical almanac" that showed the 57 main navigation stars used by aircraft and ship pilots. Using my 32 step TI-55 calculator, key in the time and date and star info then RUNSTOP and it would display.

- In Galveston Texas, I went through all the math and polar coordinates and right ascension and declination etc. to predict exactly what time the moon would appear half up on the horizon in the morning during a moon rise and what would be the compass bearing.

1979 – First visit to micro computer store – Vancouver BC

- Up to now, even though I had dropped out of Mechanical Engineering at University of Waterloo, and Professor Lipshitz had told us all about the marvels of tiny integrated circuits, and I had some hands on programming on calculators, I still had the opinion that the new microcomputers were for "nerds" and I was now doing cabinet making in Vancouver. Then I went to a small computer store and started getting interested…but not until I quite the cabinet job in Scarborough and tore open the calculator did I actually get into George Brown College for programming.

1980 – Calculator from a Dumpster – The Danforth

- I pulled on a wire hanging out of the dumpster at Macey Avenue Apartments on the Danforth where I lived. Out popped a calculator which I took upstairs and plugged it in and it worked perfectly! It worked perfectly, but as I frequently do, I purposely destroyed it to determine how it worked. More to add
- This led to George Brown College St James Campus where I went to use one of their stereoscopic microscopes. More details to add. This lead to my career
- The Government of Canada (?) had a program called "Choices" that helped people determine what career they may want to pursue. I can find NO evidence of the existence of this program, and yet I did sit down somewhere and answer a whole bunch of questions and it came up with a list of several suggestions, and one was computer programmer.

1982 – Word Processing! Magic Window, Spreadsheets! VisiCalc

MAGIC WINDOW

- The first word processing program was MAGIC WINDOW on the Franklin Ace 1000
- My green screen had 40 characters across by 24 rows, for a total of 960 characters on the green screen, ALL HAD TO BE UPPER CASE
- To get lower case characters, I think you needed to get another card which would take up an expansion slot
- I used this up until completing my second semester as a college instructor in 1984 at George Brown College and used this to create exams, assignments etc.

1982 – 3D Viewing of Vectors – Apple II GW Basic

- Sept 1, 2011 - See my basic programs folders. (WHERE DID THIS GO!) Can't run them since 1987!
- Just for fun, would like to see if I can create an Apple II as a virtual machine, then load the old BAS tokenized programs and save as TXT, then convert to visual basic.
  - Apple Mac emulator for Apple II http://www.virtualii.com/
- Computer screen is split into two viewing windows. You need to be able to allow your eyes to adjust just like the comic strip things, otherwise build viewing glasses
- Any 3 dimensional object could be represented as a data set which was entered with two elements: (now known as "wire frame" in the animation industry)
  - a set of points in the x,y,z coordinate system
  - lines joining points above
- the program did the following:
  - Retrieved the objects into arrays (keyed in to the BASIC data statements! How primitive)
  - Sets the viewer's "eye" to the default starting location. A virtual picture plane is mathematically created in front of the eye, and each object in front of the plane is drawn onto the picture plane by projecting back to the eye. This creates a true perspective drawing on the fly.
  - This was modified to have two eyes and split apart and display on the screen

    - Then the viewer had 12 keys that they could fly around in: 6 for translational x,y,z +/-, and 6 for rotational. Delta factors could be pre-loaded in inches translational or degrees rotation.
- The Apple IIe Clone (a Franklin Ace) with under 1 megahertz and 128 k ram required about 4 seconds for each refresh. I used an animation technique for the Apple called “bank switching” where you to draw on page 1 while the user looked at page 2 then clear and swap, otherwise you could watch the drawings being done real time (so slow!).
- All program code, mathematics, and logic was built from scratch based on my grade 11 thru first year university math on vectors, plus self-taught programming in BASIC.
- Lots more programs in Basic, Mandlbrot set 1 hour run time for 1 inch square black and white dots.

1982? Electronic Circuit sound generator

I forget most of my electronics...I did make some interesting simple circuits. One of them used a transistor, clicked a speaker faster and faster so the sound went up beyond the range of hearing, charged a capacitor, then hit a threshhold and rinsed the capacitor and reset everything starting at a low frequency, in an infinite loop that sounded like a guinea pig going bweep bweep bweep!

1982 – Music Synthesizer – Apple II Machine Language

Another invention, on the Apple II clone Franklin Ace 1000 I wrote a program in machine language that could play music by clicking the speaker. It could play Bach's 2 part invention #8 in G entirely in a couple of seconds and the song was still recognizable. Go To jump vector loop with counter and fell through a variable number of NOP instructions to generate each frequency. All was loaded into memory with Basic using peek and poke statements.

Lots of others in tokenized basic that you needed to export to text to be saved outside of the Apple realm…fancy star, weaving loom, Mandelbrot Set postage stamp size took half hour!
Are these programs anywhere??? Or digital backups lost?

1985 – Tetris in Basic Language

When writing the IBM Outbound Telemarking software in Toronto with a team of about 8 programmers, One of them was playing Tetris on a microcomputer or some game machine on a Friday afternoon. I watched, tried it out, did some quick reverse engineering, and made a bet with the guys I could write the program over the weekend, which I did, taking 29 hours.

Using some PC basic not GW basic but xxx. Some simple graphic squares for technique. I may have still had my portable luggable…

Here is the program logic in Pseudo Code

- Seven shapes (critters), a single, and all six combinations of 4 tiles (W left W right L left L right straight line and block)
- Field of play: 10 wide by 40 high grid
- Subroutine: ISLEGAL
- Keyboard: One key spin right, one key to spin left, one move right, one move left, space bar to drop
- Random generate 1 to 7 for next critter
- Adjust speed of each drop at the start
- At the start of each next drop position, or when any of the four spin LR keys is pressed, run the ISLEGAL routine to see if there is room for the new position. If yes execute, else beep.
- Etc

- IBM released four different versions of the Microsoft BASIC interpreter, licensed from Microsoft for the PC and PCjr. They are known as Cassette BASIC, Disk BASIC, Advanced BASIC (BASICA), and Cartridge BASIC. Versions of Disk BASIC and Advanced BASIC were included with IBM PC DOS up to PC DOS 4.

It quickly became a popular educational tool for computer science due to its ease of use. The Apple II shipped with two major versions of BASIC over the years: Wozniak's Integer BASIC, and Applesoft. Microsoft created Applesoft long before it became famous for Windows.

1997 - Return On Investment Formula Spreadsheet

- Jan 25, 2024, 27 years later….
  - This determines the "net compound rate of return" even though the ACTUAL value of the portfolio varies widely, and grows or shrinks in a lumpy fashion due to contributions and withdrawals. 2012 I took out $95,000 to close the Goderich house before selling the Waterloo house, because we could not get a bridge loan for 3 ½ months using even $400k of joint RRSP as collateral
  - It WOULD make sense to show the net compound rate of return for each period BETWEEN each and every contribution and withdrawal…
  - This uses a reiterative excel formula that zeros on a compound rate of return based not on the investments themselves but only on the date and amount of portfolio contributions and withdrawals, in this case RRSP is the entire portfolio for two people husband and wife.
- see spreadsheet, where is it?
- was posted on http://www.brightpmsite.com/ no longer there
- see two prototypes: spreadsheet and visual basic - do text version too - full disclosure of formulae
- develop a web site that works with a model that can be downloaded and a separate account for email replys
- then write an article and get it in the Globe or Financial Post that points to the web site
- also ideas on industry standards for
  - portfolio transaction format and downloads: that could feed a robust portfolio tracking system that has several features including the
  - ROI model: and also
  - capital gains tracking: that could be delivered to your accountant (the banks and investment companies have extremely poor track record in this area)
- 2009 – I put this model on my website and got lots of hits and downloads of it – need to re-instate

2008 – Daily To Do List in Microsoft Word

- I think I got my GMAIL account in 2007, and having used word processing since 1982 magic window
- Started in 2008 automatically generated one year of text with Excel with one line per day: Sat, Apr 27, 2024 paste into Word Doc
- Then each day in the morning I update what I plan to do, move items around, copy and paste info needed later etc.
- Better than a calendar with 1 square inch of space to do your planning!
- Add more about the benefits, time saving, etc

Sat, Apr 27, 2024
- Finish up most of deck

Sun, Apr 28, 2024
- Shelf for greenhouse
- Mom birthday around noon Rob and Steve etc. Pizza

Daily Process
- Go to View… Draft
- Each morning CTRL click Go To Today (which will now be yesterday) and update what you actually accomplished, make it 8 point text, and move remaining unfinished items to the next day which is today.
- Move the Go To Today heading ahead to today. Sort items for Today into the order you plan to do them in. Highlighter colours have special meaning (see below)
- All projects are now in a separate section beyond the list of days for this year.
  - Each has a level 3 heading in the TOC
  - Use CTRL HOME to TOC then CTRL click a project (quicker than paging up and down!)
  - Same process as each day above: Each project entries that are in the planned order of execution. Focus on each top item, when complete move to completed section in the project with optional date completed prefix. This may be duplicated in the calendar entries but not mandatory.
  - Change to 8 point from 12 point text.
- When all updated, copy all projects, today, and a few days ahead, and paste to email with "To Do July 15" to myself
- Update this to do list including what was completed yesterday, what is in store for today, and what is planned to be done over the next month, and any important new additions looking out for a year

2018 – Google Sheets for Investment Portfolio

- Still using this every day.
- But Google Finance is STILL in beta mode and has frequent problems with commonly know stocks like CVS suddenly going undefined or unknown!

2020 – Scientific American Content Searching

- I have all magazines for 120 years on my old Samsung galaxy and it only uses 1/3 of the chip
- On my PC the pdfs can be indexed, Microsoft search can pull out the text, key in Wright Brothers and you get every issue that contains that. SA should provide a website with this feature so you can search, then find issues, then pay to download individual issues for say $0.25. They could generate more revenue this way than with their traditional printed and/or digital edition at $99 per year
- Adobe now is developing an AI program to work with PDFs
- March 7 2024 email to Adobe proposal

2020 – Wingsurf Hydrofoil Board Prototype – Built and tested

This is actually just an 11 foot windsurfing board from the 1990's (Mistral Pandura) that I chopped down to 6 feet long and bolted a carbon fiber hydrofoil to the bottom. I have a wingsurfing sail Ozone 5 meter. Cut about 18 inches off the nose and …. To be continued 2024 – need "great stuff" sprayed on deck to make softer for my feet and cover the nasty bolt sticking through and better grip…the dangers of prototypes!

Programming Career 1980 to 2012 – Jobs/Software/Projects

Getting paid for it…

1980 - 1982 – Computer Programming Course / Operator – George Brown College

I started my 2 year programming course on Sep 3, 1980. I graduated about five weeks early in 1982 and they estimated my marks and I avoided some of the final exams. I was recruited by a head hunter who walked the halls of the college asking for top students and John and I got picked off…Started Price Waterhouse Associates (PWA) on April 13, 1982, on 64th floor of the First Canadian Place / Bank of Montreal building.
In the second semester in 1981, GBC got an IBM System/34, so John and I went to the IBM Toronto office in the big black TD skyscraper on King Street and each spent over $200 on Sys/34 manuals, with duplicates of the main ones and we shared the rest. The tuition fee for one year at GBC was $700 I think.

Subway from the Macey Ave Apartments Danforth apartments (Jan 2024 found out about Google Maps Transit Layer! Been living in the sticks of Goderich TOO LONG!)
Did I actually get paid for this? A close friend John Neto was also doing the same job. When you walked into the computer room keypunch, card reader, line printer, terminals

1984 – Computer Literary Course used by 22 Colleges/Universities in Ontario

- I left Price Waterhouse Associates (PWA) after a year and returned to the college to be an instructor which I did for two semesters, and completely revamped two courses: the Intro to RPG II, and Advanced RPG II, and also taught some Cobol. For the Advanced RPG II course, I took one of the interactive file maintenance programs from PWA

1984 - Data Base Analyzer Utility

- Fri, Oct 6, 2011
- My "FILESCAN" program would create printed file layouts or info extracts for one file (or table), or a number of files. No SQL required or coding, just:

  CALL FILESCAN "CUSTOMERMASTER"
- This evolved during my programming career and I was still using a version of it in 2008 on an IBM iSeries (AS/400) computer.
- This did not use SQL but instead did all of the processing within internal memory and arrays build on the fly with a single pass of a file. Very i/o efficient
- This is a great tool for documenting and auditing data in production and during testing, and you can show it to a user and they will tell you what each code stands for in a given field, give the value a description, mention if it is obsolete or there are problems with a particular value, etc.
- Up to 10 values for each field could be printed under each field name and the number of records found for each value was displayed:
- For example:
    - Record Type – character – one byte
        - "I" 150 (the user or programmer would say "this is an Inactive record)
        - "A" 3,200 (active records) etc...
- I never took it to the level where this user information could be captured by allowing them to enter it independently on line. Lots of user-definable parameters would be possible at the user level, file and field level etc and each could be given a name: DaveCustVer01 etc.
- Still a marketable product and idea...

1991 – Dashwood "Fasttrack" Window Configurator

- The Dashwood Windows and Doors company near Exeter Ontario had installed a new AS400 Pansophic Manufacturing software over 2 years which was turned out to be woefully inadequate and a multi-million dollar project had gone completely off the rails, and the Chicago company walked away, blaming the company of "contaminating the data". The problem was that outside of a few limited features and options capabilities, it only handled pre-entered standard sized windows in increments of 6 inches or so. A team of four employees worked almost full time entering custom window part numbers and the supporting bills of materials to facilitate the rapidly changing industry of replacement windows which other companies were making right to the millimeter in height and width.
- I designed and developed an "Order Configurator" called "FASTTRACK" on the AS400 from scratch which:
    - allowed the order entry person to key in the height, width and other features and options
    - a custom-sized window part number and bill of material would be generated on the fly to the millimeter so each component would go to the cutting floor within seconds instead of a six-week backlog of custom windows being handled by the four employee.
    - a glass order would be sent to another company (Ford Glass)
    - vertical sliders selected the correct balancers based on weight
    - pricing and costing was done automatically by sub-calling the Pansophic cost rollup routines etc.
    - The base Pansophic software was not modified in any way…rather this was "sneakin in the data through the back door" with my own lateral system, a trick I used many times in my programming career to do the "impossible" and avoid the dreaded "modified software" problems.

1991 – Stihl LTD - Warehouse to Dealer Best Shipping - Rate-Shop

- I created an Automatic Rate Shop function which determined the cost of all methods of shipments from 6 warehouses to 1000 dealers and presented these choices to the shipper, offering great flexibility, reducing annual shipping costs by 5 percent, saving over $100,000 per year, and mitigating two courier strikes by enabling multiple suppliers. Canada Post Priority Post, Express Post, Purolator, Lomis? And several LTL companies.
- integrated this system into the ship confirmation step of the JDE ERP system during bar code scanning and labeling
- Done during contract programmer along with 80 other projects/tasks completed with 4 years billable time over 9 calendar years. I provided remote support and development with my own IBM AS/400, the first person in Ontario to purchase an AS400 (C04) for home use. Two of the largest projects outlined here: Custom Logistics System (half year then 3 month upgrade)
- Design and Build custom shipping system to combine and streamline several separate vendor provided systems
- Consult with Purolator, Canada Post, and LTL shipping companies to meet their specifications.
- Designed and implemented a complete system which rate-shopped all shipping methods to run fully integrated on the AS/400
- eliminating 20 proprietary PCs in 6 warehouses, with major savings in maintenance and reduced shipping costs by $200,000 per year. Custom designed, programmed and loaded all rate tables, and programs to generate manifests and labels. Integrated to DPS package then later remapped to the JDE ship confirmation with barcode scanning.

1986 – IBM Canada – Toronto - Outbound Telemarketing Software

- My friend Peter Tatrallyay, an AS/400 contractor, (later owned all three East Side Marios is London) hired me on a contract. He and I and a couple of others wrote the outbound telemarketing software for IBM Canada at their MMSC (Mass Marketing Support System).
- I wrote the main controlling program that the 20 or so outbound telemarketers used all day long. It was green screen and had 24 function keys at the top, all of which we used for quick action. They could be in the middle of a call to a company's director of IT when they mention a new vice president of marketing. They may even have been in the middle of updating the director's contact info, but the F9 key brought up contact add, and they could key in the first and last name, enter, and go back to editing the contact info. The suite of programs under the covers were all left open in memory which required IBM to spend $50,000 more on getting 8 megs more of their own memory, but wow did it pay off! used unstructured programming (YES … GOTOs), to provide sub-second response, (more later)
- IBM had about 3 million contacts in their database, and 50,000 companies. By 1986, 4 years in IT in Toronto, I was in there 5 times! When I called from Adidas with a printer problem, my name was captured as Programmer working at Adidas. They were second to none for marketing then.
- Peter informed me a couple of years later that when IBM HQ visited from Rochester NY, they were so impressed that they copied the entire system and brought it back for their world wide operations, and then when IBM won the Malcolm Baldridge Award for Excellence, this system was one of the contributing factors. I made about $5,000 on the gig.
- https://www.nist.gov/system/files/documents/2017/10/11/1990_IBM_Rochester_AS_400_Division.pdf

1991 - Fram Filter Sperry Univac to AS/400 Conversion - Stratford Ontario

- Platform Conversion: Sperry Univac to AS/400 Conversion of manufacturing and inventory software
- Innovative solutions for mass parallel testing: auto-generated JCL code to capture hundreds of live files from reel-to-reel tape backups of production each night before and after which were then loaded to the new platform and run through byte for byte comparison.

- Created CL Batch programs driven by database driver files for the weekend recompile all AS/400 RPG and Cobol programs automatically finding dozens of programs which were defective (we then froze out the 10 consultants from Georgia and forced them to work only in TEST not PRODUCTION! This just caused a minor law suit with the consulting company who were a bunch of digital cowboys, nothing serious).
- Designed and implemented a source code and automatic installation and compile-in-place change management system which operations could use with two-character submit codes, with change logging and archiving all versions.
- Designed and implemented an environment copy and split production to test and wipe down and re-assign security to all objects across several libraries.
- Project Management Support / Consulting role: Avoided a project failure: Knowing that the system conversion had many problems due to lack of control over 10 sub-contractors, I influenced top level management and negotiated a solution to lock down security of the system and creation of separate dev/test and production environments, and delay the implementation for 5 more weeks, which then went in with no problems.
- Over one weekend, I locked out 10 contract programmers from a Georgia USA company who were working on the to-be LIVE SYSTEM, who were furious on Monday and threatened to sue. Had to go over my boss to the parent company Allied Signal for approval to pull the trigger. The necessary risks of being a consultant.

2002 – Clarica / Sun Life General Ledger Merger

- Project overview: Merge two companies' General Ledgers into one
- PM support role: mentoring with project manager to define scope, conduct stakeholder meetings, identify risks, tracking issues and decisions made
- Technical Role: Design and Implement the chart of accounts and balances mapping database and programs for daily synchronization of Clarica and Sun Life G/L.
- I devised a method to create automated offset transactions to enable posting to the receiving g/l which was organized totally differently
- over 600 companies for all mutual funds, investments, and lines of insurance business
- This was a major interface that linked the entire G/L from Clarica into Sun Life during the merger phase. The initial prototype and proof of concept was built in two evenings remotely while I was attending a conference in Denver, demonstrating that "it could be done". For a transition period, the chart of accounts had to balloon from 50,000 to over 1 million records. My design of the generic account mapping table was concentrated in less than 1,000 records and made it a manageable process. The audit trail tool saved what would have been thousands of hours of work on both the Clarica and Sunlife finance team. You don't often get credit for things that save huge amounts of work. I need to be more proactive selling these accomplishments! What actually happened is that I was reprimanded by my new boss and my bosses boss at Sun Life
- I created a unique solution by generating one single daily transaction which was automatically generated with about 1,600 debits and credits, extracted and formulated from all the other transactions, thus creating a balancing and offsetting transaction to fix everything. This was said by dozens of others on the finance team (CCIT had 105 people at the time) that it was impossible, but I wrote the entire fix in Denver in the evenings on a dial-up line while attending a 4-day J.D.Edwards conference.
- Every day, the idea was to automatically send several thousand transactions that were extracted from the Clarica GL and map and merge into the Sun Life system. Because the two GLs were organized totally differently, this would throw everything out of balance at various levels, including each sub-company.
- Worked with finance team to design, program, and implement the account mapping and transfer of all Clarica financial transactions into the Sun Life system.
- Another bit of gossip…my boss did not tell me that HIS one byte switch T or P for test or production that was buried on the Sun Life mainframe would direct my 1,600 line journal entry into either test or production, so one day I got to work and the entire Sun Life financials world

wide was totally fucked up for an entire day with lots of big wigs making phone calls. So with a one-liner sequel statement I generated a reversal journal entry that was posted that night. Never got a bonus pay for that one either!

2002 – Clarica / Sun Life – AS/400 Security Upgrade

- Clarica Finance Systems Security Project – 3 months
- A mission-critical security project that the OSFI regulators were watching so the Clarica-Sun Life company merger to be allowed to proceed.
- OSFI provides a regulatory framework of guidance and rules for federally regulated financial institutions that reflect international minimum standards. (Office of the Superintendent of Financial Institutions)
- Project overview: Increase the security of financial system computer (GL AP)
- PM Role: Project Manager: hold stakeholder meetings, project management plan, identify scope, create WBS, risk registers / review, select over 20 team members from wide range of company departments, scheduling, communications
- Consulting Role: Ensure system security would comply to banking and insurance regulations (OSFI regulators and E&Y) for merger of SLF and Clarica. Define a security model with infrastructure team (this was later utilized by IBM Global Services when iSeries work was outsourced.)
- Technical Role:
    - Lock down on iSeries all internal and external access points. Designed, coded, and implemented a new security model
    - Programmed all the CL scripts which automated the security rebuild of 500 user profiles, and over hudreds of thousands objects, data, programs etc. One-time conversion plus subsequent audits for holes in security.
    - This conversion ran once on a Friday night for 5 hours with several hundred users locked out of all systems on the AS/400 across Canada. A nail-biter…the backout was a complete system restore.

2005 – Ontario University Application Center – AS/400 Menu System

- This was a re-implementation of an almost identical one used 20 years earlier on the same system (Then called a System 38)
- Eliminated hundreds of menu programs and replaced it with a single program, so any user could get standard menus and/or custom menus that presented and launched over 1,000 actual functions.

2012 – Virtual High School – Employee Time Tracking – Bayfield ON

- I created this time tracking system in 2012 for Stephen Baker who started online courses for math and physics in Huron County in about 2005? using NOTEPAD! This is an example of how a simple idea can be evolved rapidly using a simple working prototype into a multi billion-dollar industry. His son went on to found D2L or Desire to Learn in Kitchener Waterloo which is now used by colleges and universities across North America.
- The time tracking system was used for 9 years until 2020. It used Excel, and each employee created a new Excel sheet at the start of the week. You enter the start time for your first task of the day and duration, and the remaining items only the duration. You can enter your own text on one line, and use drop down categories and sub-categories for each. The start and end time for each task is automatically updated, so you can fudge your numbers in and adjust them, put in a 45 minute lunch then 2 hour break or whatever.

1980 - 2012 – Computer Jobs List in progress

- 21 companies
- Find my old list or resume and update this section,,,
- Topographics
- 1982 - Price Waterhouse Associates – Toronto
- 1983 - George Brown College – Instructor Computer Programming - Toronto
- 1984 - Adidas Textiles – Programmer - Toronto
- 1984 – Hyundai Automotive Canada – Downsview
- 1985 – Alcan Building Products – Contract Programmer – Windows and Doors
- 1986 – IBM Canada – Mass Marketing Support Center –
- Get old resume!

Cabinet Making, Building and Renovations Projects

This is another list of actual work done, highlighting some of the more inventive processes. My dad's old expression was "this is an old trick I just made up". A complete list of all paying jobs is elsewhere. The first one is an old kids bike I found in my grandfather's garage at age 7. I fixed it all up and ran an ad in the London Free Press and got $35 for it in 1962!
Houses:

See folder with google maps screen shots
See WordPress website renovation jobs
House Fishery Ave Scarborough

- During construction Move front window and swap bathtub vanity locations, move kitchen door for more cabinets, burglar alarm wiring
- Table saw and jointer in basement

House Elgin County St Thomas

- Dug pond and creek pine trees
- Kitchen cabinets vinyl flooring Elmira fireplace insert, removed dropped floor, carpets, oak book cases and formica desks

House Frieburg Drive Kitchener ON
Cabin Manitoulin
Condo 9850 Fiddlers Green Circle Rotonda West FL 33947

- Click vinyl both bedrooms, no-see-um screen lanai

House 21 Victoria Street Goderich ON

- A shit tonne of work

House 192 East Street Goderich ON built 1870 completely gutted, now renting
House Duplex 91 Quebec Street Goderich ON
House 24 Medalist Road Rotonda West FL

Log of Inventions and Ideas on Paper Only

1985- Book Binding Method / System

- For thick soft-cover books - eliminates splitting of glue and back of book by using a diamond shaped cross hatch pattern (with a water cooled pressure mold and special thermal glue).
- Prototype worked like a charm!
- 2011...more electronic books sold than printed versions this year! This idea is losing its value, but we are at least saving trees : -)

1985 – A New Sport: Ocean Plunging – Fun Idea Only

- Imagine a bomb shaped pod with a needle point that is dropped from a helicopter or tower into the ocean with a human inside. What is the highest height that this could be done from? What speed

could this attain? How deep would it go and thus what pressure would it attain? The design parameters would be focused around the maximum deceleration that could be reasonably sustained by the occupant, and the pod. This is no more crazy and possibly more predictable and less dangerous than the rocket powered cars that have recently broken the sound barrier for one minute in both directions, or even Formula 1 racing! Perhaps it could be a ride in an ocean fantasy theme park of the future. A clear window is a must plus a camera to play back occupant's reaction. Of course the design would require that the vehicle be lighter than water so that it would eventually come back to the surface : -)

- Note: I saw this playback feature later on the Top Gun ride at Canada's Wonderland 2004. I was sure that I followed my attempt to take the entire ride with a dead-pan expression, but on inspection of the recording, this was not the case! Also saw first Sponge Bob cartoon...with the 3-D glasses.
- Two other silly fantasy inventions:
    - The "Road Hog" motorcycle that has a v-shaped chisel that cuts a strip of asphalt out of the road as it drives. This is funneled as fuel into a jet engine like cyclonic heater that heats then burns the asphalt at high temperature and uses it as thrust.
    - The "Helicopter Sledge" gift shop revenge tool, a backpack with a gas engine, a rotating vertical shaft, and three sledge hammers that rise up when accelerated. The Rambo like action man can then destroy all

1985 – LP vinyl record cleaner and Digital Recovery from Multiple LPs

- Jan 25, 2024: In 2010 I wrote this off as toast, they are obsolete! But now they are a big nostalgia comeback, and SOME people claim it is and will always be better than anything digital, and they can hear the difference, but I think this is bunk.
- Two rubber cups protect the label and shaft spins the record while you use fine brush, soapy water, distilled water rinse and then spin dry.
- Another idea…In order to recover music that is only found on old records, get at least three identical vinyl recordings digitized, and use each other's synchronized digital tracks to eliminate all the scratches and noise. If a click is on one but not the other two, then it is almost certainly a scratch and can be cleaned out.

1986 - Financial Forecasting System

- the actual operational accounting data is fed into a mapping and translating function to generate future budget information
- the generated data can be then blended with other simulated data which would then yield a complete financial picture out x number of months or years
- data can be summarized at the time scale or account level of detail - one for one account number mapper would prevent omissions or double counting, or highlight where actuals had been pulled from
- it would have the ability to have multiple scenarios based on high, low, and likely parameters
- any number of special transactions either simple and specific, or generated based on formulae and relationships with other data or transactions could be stored and fed in any number of times when generating each run of future data
- the resulting future accounting data (revenue, expense, asset, and liability) could be used to do lots of things including figuring out cash flow projections and borrowing or investing strategies (pro-forma)
- this could be run daily with actual data replacing simulated data in a rolling concept. Transactions could vary from monthly estimates right down to a date and time stamped detail level where certainty is required
- especially useful in industries of high growth and change that have large one time capital expenditures or for mergers and spin-offs

- design interfaces to common large packages
- 2011: lots of more ideas on this – lots of products already out there now – just need to integrate them into the client's particular situation – see web article I did in 2009
- 2011-09-01 – Saw Gary McFarlane at Dynac in April about marketing his product to a wider audience and using it as a PPM tool.
    - Jan 2020 … still there… should have teamed up with him! http://www.dynactools.ca/budgeting-forecasting.php

1987 - Carpet Pads For Furniture

- does not compress carpet - see drawings - still has potential - moderate market
- 2024 most people going to hardwood and click vinyl
- easy to design, manufacture, and market
- ideal for small plastic injection shop
- five spikes around plus one in the middle
- have screw hole close to middle spike on angle to screw it to a chair leg
- probably easy to patent

1987 - Computer Controlled Paving System

- optimizes leveling of roads in the cutting and in the re-paving process
- minimizes paving material used
- magnetic sensors up front have dual purpose - look for manholes etc and use control point metal benchmarks drilled in ahead of the job for guidance (1/4 inch rods one inch long drilled in)
- from cutting to re-paving is now done in one continuous operation (now in use - first seen in 1995 on hwy 74)
- (2019…see "No Stopping Traffic Highway Repair Platform")

2024 Vitamin Dispenser 1988 – Thyroid Pill Dispenser

- GREEN = MONEY MAKER … This is a shark tank idea! Perhaps leave the details out of my public document.
- April 2024: apparently you can get the pharmacy to create "blister packs" that have the time and date for each pill to be taken printed right on them!
- 1988: Just a round block of oak with 31 holes drilled in it and a plexiglass lid that spins around. Load up a whole month of pills, then each day turn the lid so the little hole lines up with the pill hole. Not really an invention, just using the birth control pill dispenser for my thyroid pill. Thirty six years later, it has done 432 revolutions!
- Added this entry Feb 28, 2024 because I want to expand the idea for supplements.
- This is a think tank for possibly several different pill organizers, going up to a Cadillac with computer screen on the bottom.
- But I need a working prototype NOW just for my vitamins.
- Vitamin and pill refills need to go into clear ziplocks where they can have big paper labels and be easily packed into carry on luggage without having a nightmare of lumpy bottles.
- I would like a pill box that has holes numbered 1 to 31, or likely 6x6 format with some spares.
- This ties into my study of diet and nutrition
- The whole lid can come off EASILY for loading pills.
- I don't want to take every vitamin every day. For example, one iron pill per week would be indicated on compartment 1, 8, 15, 22.
    - My theory is that you do NOT need every supplement every day and that this is known to be detrimental for some things like Iron. BUT on the flip side, with NO supplements and everything natural, you can in an idealist theoretical world have a perfect daily diet, this is never true. So the compromise is to take just enough supplements to fill in the gaps. Some micro nutrients are easily supplied by mulitvitamins – see expanded doc on this.

Below I am staggering the Weekly Iron from the Weekly Iodine by three days. This allows you to avoid possible interactions

- Frequencies.
  - Daily: Omega 3 6 9, Vitamin C, D, B12
  - Every three days Multivitamin
  - Twice a week, half a Zinc tablet
  - Weekly: Iron 1, 8, 15, 22
  - Weekly: Iodine 4, 11, 18, 25

- Each of the compartments will be able to have up to say 10 indicators.
- The floor of the box is clear, and it sits on a flat board where little plastic lego like stickers can be plugged in like with the word IRON on it.
- So when the box is closed, you
- Each section has a little lid that can be opened while the others are closed, so you can just dump out the pills quick and easy.
- You figure out what you want on each day.
- This could be 36 little boxes all kept in a group.
- The MON TUE WED indicators could be automated, even though the xxx
- Cadillac version: Have this clear box sitting on top of a computer tablet so the display carries the variable information underneath. People pay a lot of money for pills and supplements and spend a lot of time organizing and taking them, and for some this is a critical thing. So the display could be reviewed and updated with an app that a pharmacist could update. Good for seniors, hospitals etc.

1988 - Real Estate Listings (On The “Internet”)

- before internet was known to me I thought of computers in various cities holding the data but the concept still remains the same
- anyone could key in their house - even kids!
- the database would contain the base info like in the MLS books. A link would jump to their own website, or to a local site which they would pay a small fee for, or a photographer/measure up guy would visit also for a fee
- a car would drive up and down streets and take a picture of each house in a city and have them online whether they were for sale or not. The plan was to pay students to do this in pairs (Google!)
- a flag would be set on each listing so if you paid a fee (i.e. 5 bucks) it would become official
- most entries that were made and paid for would be valid by nature
- this would encourage a large base of info to grow until it caught on (critical mass needed for viewing audience to develop)
- when someone did an inquiry they could search through all listings or only official listings to weed out most pranks like 12 year old Joey selling the white house for $9.99
- the total cost of data entry is put on the user
- advertising would encourage people to list and to pay - once they keyed it in for free they would be 9/10ths sold on the idea of being able to sell the house commission free
- the site would contain tons of info including local bylaws, buyers checklist, legal advice, local lawyers etc

1989 – Tree Farm for Plywood Mill

- tree farm for plywood mill, poplar planted every few years, row 1 2 3 4 5, 1 2 3 4 5 where each row is planted every 3 years and 15 year old trees in row 5 are harvested and planted. East west rows, older trees to the north provide shade

1989 - Folding Electric Piano Keyboard

- an 88 key midi compatible keyboard
- the emphasis is on
  - high quality touch as close to a real piano as possible

    - light weight and portable as possible - folds in half ! 10 pounds !
- features
    - plugs into a computer with midi input - or -
    - plugs into a stereo system
    - velocity sense and note on/off etc
    - has a minimal on board low cost synthesizer and speaker system
    - special model for children or people with small hands – smaller dimension for the octave
- target market
    - the computer owner - $300 dollars
    - optionally packaged with latest board from sound blaster and music software from xxx

1990 - Tinted Strip For Windshields / Visors In Car

- thin plastic film slides into place to give added blockage to direct sun just above horizon - flip or slide down from visor as an extension - you can see through it but cuts out most glare

1990 - “Better Booster” Jumper Cables – Instructions and Test Light Kit

- 2008 – see test plug sold in stores for receptacles – find manufacturer
- Sept 1, 2011 –added in the numbering for each terminal plus and short out protection
- A test probe indicates correct polarity before hooking up the final clamp: Green LED is Go and Red LED is wrong
- hookup instructions printed on a plastic card sequence of instructions for hooking up your battery, including road safety tips... do’s and don’ts
- The numbers 1 to 4 for each of the four clamp ends attach with Velcro wrap. The last one has the instructions plus LED flashlight
    - 1. Black dead car
    - 2. Black boosting car
    - 3. Red dead car
    - 4a. the second last step before hooking up the fourth jumper cable is to touch the test probe to the battery post: green LED is ok - red LED is wrong polarity
    - 4b. Black dead car
- How to jump start a car http://www.carbuyingtips.com/jumpstart.htm
- Better booster cables could have plastic covers or insulating solution so ends do not short out during hook-up
- sales options
    - minimal: Test probe can be sold separately
    - included “free” with “better boosters” cables as a promotion
    - LED flashlight included in kit or as an option
    - Volt meter sold as an option
- patents
    - http://www.google.com/patents/about/4969834_Jumper_cable_apparatus.html?id=MpkgAAAAEBAJ Nov 13, 1990 expired last year
- 2011: I presented this idea to the owner of a large KW Canadian Tire Store…we also talked about programming a back-door function to the inventory database that would allow clerks to find anything in the store with hand-held devices. I had all the AS400 know how, but this idea got passed on to the Canadian Tire dealer association to be used in all the stores. He said nobody knew where anything was! I worked with the sister of the man who created CTC inventory program (System 38/AS400), kept it out of IBMs fingers, developed and sold it to COSTCO as well, and ended up making several hundred million! The owner of this store started out as a bicycle builder at a CTC, four years after I did the same thing in 1973 where I assembled 1,300 bikes….76-1088 men’s Japanese ten-speed lime green $88.88 the biggest seller and not one was returned for adjustments. They still use “76” for sporting goods product codes 47 years later.

1990 - Desert Solar Power Plant

- some of the power is fed into a replication plant which generates more solar cells so the plant can grow by itself (with a minimum input of raw materials - use sand!)
- the focus is not on technically achieving maximum efficiency per square meter, rather it is on generating the most power for the least dollar, and having a moderately low tech design with a small startup cost and an early break-even point with future improvements to be made once a plant is operating in the black
- 2020…An area 200 by 200 kilometers can power the entire planet! Not too late to start. Create hydrogen fuel then ship it…Saudi Arabia looking at it. (2020 Saudi Arabia still looking at it….how much oil do they REALLY have left?)

1991 – Dynamic Hierarchical Product Structure / Bill of Materials

- While at Dashwood after getting "Fasttrack" working, I was thinking of a Bill of Materials hierarchical product structure which could contain "variable elements or formulae" that could be generated real time and then passed up or down the product structure. This I knew was already existing within AutoCad which some of the engineers were using to design bay windows. Unlike simple flat windows where dimensions were easy to create on the fly with addition and subtraction, the bay windows had angles so some trigonometry was required. Parametric equations etc…My idea was to generate the window bill of materials within AutoCad, then export this into the Pansophic system where it could then flow to the production floor. But management could not see the benefits, plus were too busy being crooks. About 12 years later at a computer show I saw my very own ideas being sold.
- Variables would be created like "rough-in-width", and other variables would be derived from them on the fly like "finished-width" = "rough-in-width" – 0.75 inches (parametric)

1992 - Wind Shear Warning Device For Aircraft

- incorporate previous notes in binder
- the device is turned on when weather indicates the possibility of wind shear - especially on landing
- small metallic pellets are shot out in front of the plane at the rate of i.e. one per second that can be tracked from a detector on the plane.
- they travel at supersonic speed
- They disintegrate by oxidization. Sodium or something
- Doppler radar can give similar results but this would be an independent source of information. Could the pellets be replaced with sound waves? only in the subsonic -
- the system would indicate the direction of the shear and corrective action necessary and estimated time of arrival (usually a few seconds) which would enable the full power up and flaps up option for an abort landing (touch and go) and also beacon the airport controllers real time

1992 - Senior Citizen Electric Cart Improvement - Wide Track

- I ran this idea by uncle Bill when my grandfather with both legs completely gone and in the hospital bought one of these machines, went out for a tour down the sidewalk, and promptly fell off at the first uneven section
- front wheels can spread wide when outside or on bumpy or uneven terrain for stability
- can shrink back in for getting through doorways etc

1992 - Drive-in Self-Serve Headlight Taillight Check

- Sept 1, 2011 – embellishing...go to CTC and talk to owner – he also started as a bicycle builder
- tie in with chip king window repairs or have in a busy gas station
- drive-in services
- free drive-in self service has the following features:

    - ~~2023 eliminate: an attendant may be present for a few hours posted per day (or tie in with gas bar)~~
    - "Light-Check" - mirrors let the driver check all lights without getting out of car.
    - "Tire-Check" – tire pressure gauge and fill
    - "Battery-Check" just a volt meter
    - "Parts-List" printout: They can punch in their vehicle make and model and get a listing of all of the part numbers printed out and accessories that fit their car! (inside the store). Location of fuse panel
    - This gives them the impression that they can save some money by fixing their cars for free, and some people will, but others will be drawn in for help
- Products listed per vehicle
    - Wiper blades
    - Headlights / tail lights
- develop in conjunction with Canadian Tire and have outside in their lots
- if they have a problem then pull in to the service area - the car make and model input will then print out a list of all the bulbs and fuses normally needed for that car - this would have the CTC stock numbers and price included - encourage having spare headlight if it is low cost type
- 2023 – a self-serve kiosk would allow the driver to enter their email, use Ring Camera to talk to parts counter to confirm year and model, and get an email that would provide a list of all the common self-service parts for the vehicle, light bulbs, wiper blades, etc. vehicle and get the persons email, and optionally print this in the store,

1993 - Railway Track Bed Monitor

- Just watch a train go by…you can see the rails moving up and down under the weight of each car. This system captures this deflection, and any other deviations from the ideal engineered track bed specifications.
- I presented this idea to a retired VP from CP rail at an investors meeting held by Royal Trust in London Ontario.
- This uses track bed deflection sensors on the front locomotive of the train, plus GPS, track bed click noises (the clickity clack info), and inertial guidance system (see accelerometers, cruise missile components, Litton Industries etc.) to record railway track profiles.
- looks for sections that are outside of accepted tolerances
- looks for sections that are soft (I call it "dynamic compression monitoring")
- two sensor arms are mounted at the front of the train a couple of feet in front of each front wheel of the locomotive, each holding something to measure the distance to the railway track directly below (sonar pulse, reflected light?). Each track will have already begun pushing down from the weight of the train.
- Two more sensors are mounted around the middle of the locomotive where there is a measurable load and the track will be pushed down close to the bottom limit.
- compares the fingerprint of each track bed real time previously recorded profiles to look for progressive degradation
- A ground hog can dig a hole, a spring flood can hit, and erode the track bed so that instead of dropping one inch, it now drops 2 inches. This would be a red flag and alert a crew to fix the spot before we have a DERAILMENT OF OIL TANKER CARS!
- April 11, 2000 sent this email to CSX Corporation www.csx-surplus.com on web: "I am a programmer but an inventor as a hobby. One of my ideas is to monitor railway track beds. I have several ideas. I heard on the news that you had some new system? I just wanted to know what you have or others have. My system would do dynamic track bed monitoring as well as periodic checks and comparisons for progressive track bed degradation due to erosion etc. Anyway thanks thats all for now."
- Jan 2020 …. What a nerd…no idea how to market my ideas. Not too late for this idea

1993 - Music Boxes Made-To-Order Custom Songs

- have on the internet - you can select from tunes or send in your own - you can hear it first. Once you order, the drum is drilled and created automatically on a machine (high end item $500 plus)

1994 - Sign Painting Machine - Trucks - Buildings - Etc

- works on the same principal as an ink jet printer only scaled up
- team up with a printer company and pay licensing to access the printer data stream and convert the Inkjet Head colour commands in order to drive little spray paint heads… spot resolution say quarter inch pixels
- ran this idea by two or three Websters by their pool…Norm, Steve, Lee, John at some point
- uses a large 2d frame that can be held into position
- roller follower system allows rough surfaces to be handled like brick buildings
- for re-doing trucks with new ads periodically - have base coat white that is enamel based and the colours are laid down in alcohol based which can be washed off and re-done
    - Jan 2020…this could still be better and cheaper than the vinyl system.
- thinking about my "1982 Epson Printer with Graphtrax"…it had 9 pins I think…8 for regular characters and a ninth pin added for descenders. Fast forward to Hewlett Packard 1991 laser printer and their industry setting HP-GL5 language.

1994 - Geography And History Map Of The World

- front end software to view data
- more details to add in…not documented, just in my head!
- zoom in / out
- history time-lines
- filters - date from and to
- people events companies

1995 - Video Surveillance

- Oct 6, 2011 - until today, this was just a one-liner entry and was all just in my head.
- I first started thinking about this in mid 80s when I think it was a subway employee was killed but the camera was to low-res to identify the perpetrator. Later proposed to a friend to help me design and build it, but he never took me seriously and suggested that the camera should have a needle that takes a DNA sample from the eye of a bad person. Ha ha ha... I let someone else throw away my great idea. The story of my life! In around 2005 I saw a TV program with such a system and it even had the laser driven master and slave re-synchronizing (see details)
- The functionality listed here needs to be further elaborated and broken down into each physical module with interface characteristics, parameters, and data elements. Scalability can be achieved by making the system flexible and allowing everything to run on one server, or be distributed for load balancing or redundancy.
- one or more stationary cameras capturing images (masters)
    - set up to cover a given surveillance area
    - these are sent simultaneously to the archiving system and the image processor
    - medium resolution with the standard three colour CCD chip and camera technology re-tuned to one infra red and two visible light, or various combinations.
    - Output images can be further processed real time by central computer to drive additional high resolution cameras.
- Image processor routine – central server
    - Binary pixel data from each frame is numerically subtracted from the previous frame to create a net change or differential. Maximum numerical deltas indicate something moving or getting an illumination change. (This is already in use by many technologies, like Citrix to compress video transmissions into sending deltas only – opportunity to use and pay for other patented processes rather than build from scratch)
    - Purpose is to determine "hot spots" and send directives to high resolution cameras for more detailed capture
    - Raw differential data is streamed to a secondary routine which has fuzzy logic, pattern recognition, and neural network / learning capability to find and filter
    - Done independently for each wavelength

- Archiving to disk
    - These can be set to save from say 100 frames per second down to one frame per minute, depending on the application and data storage capacity.
    - The software could throw away the 100 frames per second after x number of days or hours, but save 1 frame per second, etc. The user could define any number of "cleanup, and purging, and retention" processes that could be run automatically or on request.
- high resolution cameras (slaves)
    - fixed, 1 axis pan, 2 axis pan, zoom, or combinations of
    - can run independent or controlled from input directives from image processors based on "hot spots"
    - multiple high resolution close up shots per second
    - control quick x and y axis control of positioning: various technologies possible:
        - piezoelectric crystals.
        - Tiny disk drive motors (voice coil on 2 axis using track select to move). This would be part of the data stored in the
- Master slave synchronization
    - During setup, or periodic maintenance, the moving cameras could be ordered to send out light pulses that the master could read so it would know how to work backwards and re-position the slave camera to an exact position where it was detecting motion or something worth capturing.
    - This would be done in an x-y raster scan synchronization process that would build an offset table. After a few passes it would converge on an accurate setting.
    - The software could create fake hot spots to see if the cameras were positioning correctly to pick them up, using background image as a reference point.

1995 – Internet Sales Idea – Bird houses, Birder Gear

- Got my first internet connection in 1995, proposed to Stihl Ltd to GO WITH THE WORLD WIDE WEB FOR ADVERTISING! Then Amelecom who I did IT work for, in Aylmer, had its server business potentially up for sale and they quoted me $40,000. I created a home page, fiddled around, and went back to work at Stihl and other companies on contract, always struggling to make and save other people way more money than I ended up making!
- Sell bird house kits over the internet - even if I just break even it is experience in e commerce. Then also birder gear, binoculars, tripods etc
- wish I did it then...too late for ground floor
- get a small business started then delegate it to someone else? get items manufactured

1995 - Recycling Guidelines - Book Or Online

- from manufacturer / packaging through to the recycling
- TV show for David Suzuki

1995 – Online Rules - Sports/Games – Olympics, Football, Cards Etc

- also how athletes move up through the levels based on points
- get ready for Olympics
- various versions of golf - match play etc
- Good application for "Wikipedea Curator"

1995 – Self-Driving Cars – Accurate Lane Positioning Pavement Magnets

- Pavement would have magnetic rods drilled and inserted on lane boundaries every 50 yards (plastic, like fridge magnets so they would grind up with re-paving)
- Cars would have two sensors, one under each front wheel
- The car's lateral position within the lane would be monitored and info fed into the self-driving software as an additional input to GPS and camera inputs, and would be important in snow covered conditions.

- Potentials:Tesla, and 2021 Apple Huyndai-Kia Georgia project
- 2022: Elon Musk's Telsa each car records and transmits their location to create a very accurate map of where the roads are and lanes, even with construction. The road bed rods could STILL provide additional information

1995 – Skin Cancer Monitoring Device – Optical Body Scanner/Comparator

- One Liner: by comparing two photographs of a skin cancer lesion taken at different times, one can easily see the differences. By using a computer to compare full body scans, you can create an early warning system.
- I have had this idea since 1995 when at an astronomical club I saw how planets and asteroids were detected automatically by computer comparing sky images and looking for differences. Then in 2005 I thought of using the same process for the early detection of skin cancer. I ran this idea by someone at the Accelerator Centre in Waterloo ON in 2009 because of what they said they did and they said that their company is actually working on something like this.
- 2009: This invention is already well developed.
    - http://dermatology.cdlib.org/1506/original/melanoscan/drugge.html
    - "The use of an automated, whole-body, diffusely lit digital imaging enclosure to produce serial images, which were then compared, using an astrophysics image display method, enabled a private practice dermatologist to detect melanoma at significantly thinner Breslow depths compared to all other clinical detection paradigms examined in this study."
- My ideas are related to making ANY improvements to the design of the various systems out there, leveraging existing work and paying royalties on other patents or partnering with other companies, and optimizing the deployment to the maximum number of people and still make SOME profit. I also have some ideas which may be original and could be patented.
- Detail file name: **2009_skin_cancer_monitoring_2011-10-12.docx**

1995 - Heated Blankets With Hot Air

- circulating fan and heater is in basement - plumbed in like a central vacuum cleaner
- comforter has a hose attach at the foot of the bed down through the floor / wall.
- no danger of radiation from electric fields
- pre-heat your bed

1996 – "Information Strings" (now xml and tags)

Oct 7, 2011 – written up in here...I may have other docs on this somewhere

- a way to enhance or integrate existing disparate databases and information repositories
- write up my ideas again on creating a way to make all information able to be connected through a common denominator or methodology
- I am sure it has all been done, just my own ideas on the subject
- Windows search is not too bad for finding file name, folder name, and file contents, but lacks robustness
- Investigate further for latest developments. Find out what the actual scientific field of study this is
- extract old word docs or pdfs into tagged files
- relational databases could have individual records extracted,

1996 – Blueberry Farming Semi-Automated

- I got this idea when going to Rondeau Provincial Park on one of many trips there to go windsurfing. There was a blueberry farm on Highway 3 where you could pick your own, and there were several acres of beautifully ripe and ready blueberries, mostly rotting away because there were not enough

people passing by that were interested. I talked to the owner and they were thinking of giving it up and selling it. OPPORTUNITY LOST!. I immediately thought up an automated blueberry picker

- Have an electric solar powered cart that has four big light weight spoked wheels and a frame that arches up and over the row of each blueberry bushes
- Plastic sheets 3 by 8 feet on each side sloping away from the bushes get gently squeezed in from each side, with triangular "jaws" reaching in at about a foot off the ground
- Then vibrators would shake off the berries, they roll out on the sheets which have gutters, and these are also sloped backwards so the gutters empty into buckets
- The buckets are emptied and the end of each row when the machine turns for the next row
- Bushes would need to be groomed to fit the design
- Ultimately the bushes could be planted, trimmed, fertilized and watered with the same slow moving tractors

1996 - Weed-Killing Robots For Farm Crops

- Ground Crawler
  - mechanical ground crawling robots that snip weeds off at ground level (or spray like in the overhead version)
    - solar powered or fuel cell
    - locally corrected GPS for accurate positioning to limit range of area
    - could follow a raster scan path or be directed to areas of high infestation from top view robots (2023 oh yeah, they're now called drones!) or satellites
- Automated Overhead Two or Three Wheel Walker
  - 15 to 20 foot diameter wheels have i.e. 12 padded spokes that minimize crop damage
  - The machine is extremely light weight and has almost zero impact on the crops
  - A working platform hangs down from the axel which carries the computer, solar panels, vision systems, and movable spray arms
  - uses vision system and neural network (fuzzy) logic recognition of weeds
  - sprays a narrowly focused blast of herbicide like roundup at high accuracy to offending plants from a gun positioned fairly close to the plants
  - spray material also contains a harmless chemical which is tuned in to a specific frequency of light on one of the CCD chips on the vision recognition system that does a post-spray feedback check to ensure that accuracy is maintained, and to enable real-time micro adjustments as well as feed into the learning module.
- reduce or eliminate herbicides
- 2020 … drones for initial surveillance and/or deployment,
- 2023 now doing it for the swamp grass from Egypt

1997 - Automotive Video Monitoring Camera

- logs events while driving through a fish eye lens on the roof for a 360 degree (and/or or four shots 90 degree multiplexed with a rotating camera - 10 frames per second?)
- use for your own insurance / analyzing accidents / prosecuting bad drivers

1998 - TV Guide – Killer App

- Details Entered Sun Oct 16, 2011. Some features have been added since original idea.
- Have a killer application for TV viewers to search for their programs.

Problems are listed next followed by solutions indented

- **Must see all channels:** Currently I have a Rogers account which shows me about 500 TV channels. There is no way to block out the ones that I do not currently subscribe to, so I may have to page through 24 different NFL channels to find a favourite nature channel. It is not likely that Rogers or any other self-serving service provider will give me the option to filter these out, because they want me to see them and subscribe to more.

    - If the cable companies are unwilling to provide the data, enlist the millions of viewers to enter the data for you. Each volunteer only needs to do one channel. If you have 10 people doing one channel, then you use the data that matches for the best 7 or 8. See click workers and moon crater counting project
- **Screen viewing is interrupted**
    - I can only see five channels per page-down, and three hours across.
- Solution:
    - Have a web-based service
    - Hook it in
- It would be a web-based service
- 2023: streaming! Goodbye cable and tv networks?
- See 2024 better IMDB with user-definable flags

1998 - Swap Batteries For Electric Cars:

- See article from 2009 Scientific American at bottom of this doc
- Some electric vehicles could have standard sized batteries which would be replaced at a service stations automatically
- a swap would take less time than a gas fill up and could be done unattended while you wait in the car
- each vehicle would have a receptacle in a standard location which could take any number of batteries - more for a bus or truck
- as technology for batteries got better they would not get smaller, just either lighter or hold more energy
- calculating the recharging fees. This is the trickiest part off the whole system
    - Each battery would contain a micro-chip (patent?) that worked like a hydro meter. When you swapped out an old battery, the reading of how much energy you drew during your rental times the rate charged at the drop off station would be how much you paid. This would create competition between the charging stations
    - what about if you charge the battery yourself (i.e. several top ups) before returning the battery?
    - The battery would know how full it was when you picked it up and how empty it was when you dropped it off and you would pay the difference? No
    - Instead, you would:
        - pay for a full charge when you picked it up
        - be monitored accurately for what is drawn out
        - be credited for the difference when you dropped it off.
        - If you got a bum battery, then this would be detected by the software and charging/de-charging history and you would be adjusted accordingly
        - If you charged it ten times and put 1000 units of energy in but drew out only 700 units, you would be credited the difference of 300. This may be charge that is remaining, or energy lost due to a battery that is getting old, it does not matter.
        - the micro-chip would monitor the life of the battery so that it could be taken out of service when warn out, and provide the manufacturer with statistics
    - the vehicle would talk to the batteries and know how much energy was left
    - the car would have GPS and would determine the most efficient route and guide you to filling stations and tell you how many stations were still in range (and when you were actually toast dial the CAA?)
    - when you bought a vehicle the price would be “batteries not included???”
    - There would also be a small flat rate for swapping charge to encourage people to use up most of the energy.
- standard receptacles:
    - the vehicle could have room for two standard sized sections: each would feed electrical power to the rest of the car.
    - They could be any of the following:
        - fuel cell unit

        - rechargeable battery unit
        - gas engine / generator
    - Each unit can be removed for servicing or recharging
- benefits
    - can use current technology - swapping stations could start as small experimental manual slide in slide out frames
    - prototype vehicle: a small car like a Honda civic with the motor stripped out, the wheels make lighter, and the trunk used for the batteries
- problems
    - government regulation required to level the cost of bulk hydro to charging stations?
    - how do you get the infrastructure started? in a high density area like L.A. - prove the technology first with proto type
    - how do I make money at this?

Sent emails to Bill Swann electrical engineer friend in Houston – 2009 – he said "they" already have batteries to do this that don't need to be swapped. A year later, see Scientific American.

Jan 21, 2011 watched "who killed the electric car"
http://en.wikipedia.org/wiki/Stanford_R._Ovshinsky
http://ovshinskyinnovation.com/
Ovshinsky Innovation
Look for our new website coming soon....(two years ago)
1050 E. Square Lake Road
Bloomfield Hills, MI 48304
To contact us:
Phone: (248) 540-0245
I phoned there and a lady said that he does not collaborate with others due to legal reasons! I should mail my ideas in.
Web page last modified Sunday, October 26, 2008 11:34:46 PM

April 9, 2011: apparently he has had a break-through in solar panel design...need to follow up.

- January 2023: I woke up with the idea of instead of having swappable batteries in the car, instead build little trailers that can easily be safely connected to any car with an industry standard…the trailer hitch. Turns out a company in Europe already doing this (more to add), and the company in Israel that took my 1998 idea from 2003 and got "top 10 inventions of the year in Scientific American 2010" finally scrapped their idea in 2013 because as I had always feared, it is inherently too complex because of all the different ever changing sizes and shapes of cars and their batteries. The other company started out with a hybrid trailer, gas engine plus batteries, but have scrapped the gas idea since battery tech has advanced so quickly. So you don't have to OWN the trailer, you could pull in to a charging station, switch and go! …

1998 - Beach Creatures

- Walking down the beach at Rondeau Park Lake Erie I saw this black sand. Took it home and found it to be magnetic. I have a big dish of it with magnets.
- children's educational toy - magnetite crystals in sand. The plastic critter has magnets inside

1998 - Data Base Accelerator

- This idea was to speed up J. D. Edwards software on the AS400.
- I used it manually in 1986 at T J Liptons as a temporary fix to the Software 2000 General Ledger where I reduced the half-hour run time of a particular job to under 10 seconds! Also lots of tweaks at Sun Life.
- Intercept all the SQL requests issued to the OS400 operating system during the day.
    - find out how to do this from IBM

    - find out how to monitor individual jobs etc
- Analyze these and create special temporary logical access paths based on the major key sort criteria and possible select/omits.
    - once the access path is in place, the next same database request would drop to a small fraction in execution time
- Periodically check if an access path has not been used for a period of time then delete it so that it no longer drains resources.
- This would have no impact on existing software functionality, but serve as a database accelerator based on actual use

1999 - Short Bread Oven

- I have separate doc on this with drawings – temperature and humidity control etc. 720 rounds of shortbread per hour. 2008: Turns out to be almost identical to commercial design.

1999 - Box Measuring System

- length width height weight for shipping systems - conveyor feeds 45 degree square and wand touched on kitty-corner gives a pulse which is picked up by a receiver like on a touch screen
- or: boxes have dimensions in a bar code on the box
- either printed with box (make it a standard) or
- stickers could be printed up and affixed when receiving

1999 – Swappable Batteries for Electric Cars

Jan 25, 2024: I documented this in 2000 and sent an email to Scientific American but never got any feedback. Should have persisted! I also had the idea in 1999 after separating from first marriage to move to LA California, buy a Honda Civic, rip out the engine and electrify it with two rear wheel electric motors, and rip out the trunk to allow a frame of standard lead acid batteries that could be quickly swapped out in a few minutes. These could be left somewhere charging. Then do a daily commute, and record the cost of charging the batteries….By 2010, the idea evolved to have two (or three) sections in the trunk: one for a gas powered engine that generated electricity (Honda generator), and the other for the battery swap pack. Basically a "plug in hybrid"

- June 1, 2009 Scientific American article 10 top inventions for the year: Guiding Science for Humanity
    https://www.scientificamerican.com/article/scientific-american-10/
    - Jan 24, 2024 link still works,,,(Note the scientific-american-10 sub folder name does not contain the year or month or description of the article, rather archaic)
    - Ten researchers, politicians, business executives and philanthropists who have recently demonstrated outstanding commitment to assuring that the benefits of new technologies and knowledge will accrue to humanity.
    - Shai Agassi Founder and chief executive Better Place, Palo Alto, Calif. A wonderfully simple recharging scheme may ensure a future for electric vehicles
    - In our impatient economy, electric cars simply haven't been able to keep up. Sure the Tesla Roadster is fast and trendy, but a luxury price and a charge time of about three hours curb its appeal. Chevrolet's Volt, scheduled for 2010, though more accessible, can venture only 40 miles before petering out. Shai Agassi, an auto industry newcomer, thinks the prospect of a world without oil requires a more expansive vision. The former software executive is methodically assembling an entirely new automobile infrastructure: an electric recharge grid fueled by solar and wind energy. Drivers would buy miles on a subscription plan, then swap out discharged batteries for fresh ones at conveniently located exchange stations. In California, for instance, "switching stations" 30 miles apart on major freeways could cover the state. For a short-distance top off, workers or shoppers could park and plug into a metered charging spot. An operating system in vehicle-based computers would help drivers match destinations to their battery life and recharge options.
    - Agassi's start-up, Better Place, launched a pilot last year in Israel, where tax incentives should bump up interest and help support a plan for mass marketing by 2011. Venture capitalists have committed $200 million to the business; Denmark, Australia, Ontario, Hawaii and California also have signed on for their own charging networks. Renault-Nissan will supply electric cars for the deal. Eventually, Agassi anticipates, lithium-ion batteries will extend mileage, and standardized sizes will enable the network to serve multiple car models. By weaving technology, policy and practical road service together, Agassi's system could make electric cars a reality. Sally Lehrman

June 25, 2013 article about failure of Israel startup
https://www.tabletmag.com/sections/israel-middle-east/articles/ev-better-place-agassi

2000 - Bike Roller Stabilizer System

- modify the standard indoor bike rollers (exercise machine) to have a safety stabilizer system that allows lateral free float and tilt up to about 15 degrees either side
- many cyclist (including me) are fearful of getting on one of the current models because it is easy to slip off and crash to the ground
- see drawing - something I want but tiny market - wait until I try rollers without support first?
- Another invention…indoor bike with big inertial flywheel so you can really stand up on the pedals like you are cranking up a big hill. Most roller systems the wheel slips as soon as you do this. Also incorporate electric generator to do braking that you can control the wattage with a dial…and feed hydro back into your wall! A ham sandwich will earn you about 3 cents.
- 2020 get an old bike and chop it, weld it up (Don)

2005 – Ear Protection for Cyclists

Entered Sun Oct 29, 2011

- If you cup your hands over your ears and face them backwards when riding your bike, you eliminate the rushing sound of the wind in your ears. This can contribute to tinnitus. Have some cup shaped foam flaps that are held in place, perhaps with pressure finger wires from the helmet.

2005 – Boot Washing Trays

Entered Sun Oct 16, 2011

- For when employees or patrons come into a building in the winter with their salty slushy boots.
- Home Hardware entrance is a HUGE mess. There is usually one employee cleaning mud off the stairs for a few hours per day. There could be 20 people per minute coming in at 8:00 am from a 10-acre parking lot. Most of what is tracked in is the frozen slush which can never be stomped off.
- Similar situation at OUAC
- Tray Attributes:
    - up to 3 feet wide and 10 feet long, or have multiple stations.
    - contain enough salt in the water so it would not freeze (tons of salt is sprinkled on the sidewalks anyway)
    - have a shallow end tapering to a deep end
    - options
        - brushes with one meter long handles leaning on far side, or held at foot level
        - two sections: initial wash and rinse section – walk through with divider
        - have
- inside doors would have absorbing towels that would be re-laundered, and-or the regular mats that can be taken away

2008 - Heat Exhaust Fans For Homes And Buildings

- Detail file name **2008_Exhaust_Fans_2011-10-10.docx**
- I have a design (physical mechanical workings plus programmable control parameters) for a device that would mount into the ceilings of one or more rooms in a house which would remove heat into the attic when it is economically cheaper to do so than by using central air conditioning.
- This could be done at a small fraction of the cost.
- This would be done whenever a threshold temperature (programmable through the day) in the room reached a certain point and the outside air was at a low enough differential to be used as cooling.
- This would actively monitor “hot-spots” independent of the central air system’s thermostats.
- Considerations for humidity increase as well as internal v.s. external house air pressure would need to be considered.

2008 – To Do List in MS Word - Methodology

- Wed Feb 7, 2024: Adding “methodologies” to my inventions. These are easily shareable

- "PLAN your WORK, and WORK your PLAN"
- I have been using this method since 2008 or 16 years.
- I update this doc almost every morning, the busier I am and the more projects I am working on, the greater the need. If I need to spend 45 minutes to drive home to get one tool to finish a job, then the 10 minutes of planning to avoid this has already saved 35 minutes, the cost of gas, and the frustration.
- MS Word Automated table of contents – Click to jump to a section, including the current date within the year which I use every morning.
- Daily entries are populated a year or more ahead of time. These are generated in an Excel and just pasted in as a block

  Wed, Feb 7, 2024
  - Garbage only

  Thu, Feb 8, 2024
  Fri, Feb 9, 2024
  Sat, Feb 10, 2024
- I will then populate recycling days every second Wednesday. Sounds like a lot of work? Not really, because the time spent xxx
- I have everything I need to do for the next month or so bunched up a few days into the future, or contained in sub-projects, and each day select what I am doing, put them in order.
- The next day, if there is something that did not get done, it just gets cut and paste to today or a future date, or strike through.
- Items that WERE completed are set from 10 point text to 8.
- So now I also have a complete diary as well.
- It is also a good place to paste details from other things, like a chat transcript on how to get the Aeroplan points that I missed on a previous flight.
- This serves as my working calendar. Some days get nothing, but you can get a lot more planning into a Word doc than a single square inch of paper on a calendar, and no eraser is needed.
- Other methodologies to add:
  - Google Sheets for investing

2009 – 3D TV Viewing Glasses – Chuck Gammage Visit

Written up Sun Oct 16, 2011

- I saw a prototype from Korea in an animation studio in Toronto. Most awsesome 3D movies ever viewed. Far superior to Avitar experience. Basket ball players running in front of me like I could reach out and pick them up!
- HOWEVER....I have an improvement in the design....
- The problem with the Korean prototype is that only a limited number of viewers in a given room could view the screen, it is contained in a clunky and restrictive box that you must stand in front of. My improvement would allow 30 people in a room to view it from up to say 30 degrees either side, as you would with normal TV.
- Half of the solution: viewing glasses (not like the ones already out there) has already been invented and patented but is sitting idle. I would use some of the ideas from this, but not necessarily all or the same: http://www.patentstorm.us/patents/5943165/claims.html
- The other half is another idea that has been around for some time. I just need to bring the two together.
- I hung out with Chuck around 1972, the great cartoonist of our high school, and went with him to 2001 A Space Odyssey movie. We started a group of animators and wanted to do movies! Chuck then went on to do Space Jam, Who Framed Roger Rabbit, and now still has his own animation studio https://www.cganim.com/
- Detail file name: **2009_3d_tv.docx**

2010 - RIM Blackberry - side key pops up custom menu navigation App

Entered Sat, Oct 22, 2011 - I mentioned this to folks at BlackBerry

- Having the two side keys hard-coded to two functions is very inflexible and is a low utilization for the user experience
- I think it would be fairly easy to have one of these buttons call a blackberry app which would serve as a menu processor.
- user-defined functions could be menus, menu options, application calls, or launch browser or fire in a favorite address to already opened browser.
- These could be recorded like macros, or copied from the applications menu (like short cuts) and pasted.
- You could create your own icon with a picture or simple text, e.g. you could have three that would call a stock browser and have BCE, CNR, RIM. One click.
- You could assign the letters A-Z or 1-9 which would appear in the upper left of the icon and would be a hot key (to your next sub menu or function). While you were within the menu navigating application, you could have a letter like 'B' always go to your Beach menu, even if it is not currently displayed (a GO TO).
- You only see what you want on each of your menus, not a lot of crappy bookmarks.
- With the existing application on my Bold 9000, the 'K' key within the internet browser approaches this functionality since the hierarchical structure is displayed as collapsible sub-trees, but you still must navigate using the track ball etc, plus the higher level elements still remain visible, robbing precious display space (or "real estate" as I call it).
- I want to be able to organize my own hierarchical functional structure so that when I press the side key, I see my main menus, then one click and I am into my "at the beach menu" where one more click and I can launch browser with "sailflow wind speed and directions" map.
- See MS Word when you hit ALT how top row goes to ALT 1 ALT 2 etc

2011 - Fusion Reactor Idea – "fuel injection"

January 2011

- This topic is really beyond my capabilities and just total dreaming. I would need a physicist in the specific field to give me a lot more on the required and possible densities involved required for fusion.
- Deuterium/Tritium is injected into a reaction chamber using the same technique as accelerating particles in the LHC particle collider. The packets are elongated parcels in a hot-dog shape, and squeezed in the x then y axis to concentrate them with magnets before entering the chamber. The elongated shape allows timing of the laser to be off one way or the other, while the focusing of the beams only has to be concerned with the x-y location along the axis.
- Once in the reaction chamber, laser beams are focused to converge at a sweet-spot on the package, as in the other physics experiment called the Ignition Facility.
- Immediately after reaction, a blast of air or something moves the heat generated into a collection chamber for further processing to drive a steam turbine to generate electricity
- This happens in multiple rapid pulses per second.
- Or fuel pellets could be loaded into a rotating magazine like a 6-gun
- The corrosive problems associated with a torus shaped Tokamak reactor are minimized or eliminated
- Problems:
    - The laser energy must also be focused extremely evenly across the target's outer surface - a very difficult task - in order to collapse the fuel into a symmetric core.
- Questions:
    - can Deuterium be accelerated the same as a metal like gold is used in LHC and also squeezed in the x y axis?
    - Does the fusion have to take place in a vacuum to get enough laser power into the target?
- Links
    - http://en.wikipedia.org/wiki/Tokamak_Fusion_Test_Reactor
    - http://en.wikipedia.org/wiki/National_Ignition_Facility

    - http://en.wikipedia.org/wiki/LHC
- Oct 12, 2011: the current fusion reaction at the NIF uses a symmetric implosion.
    - What about having two sets of say 30 focused beams coming in dynamically from both sides of the "hot-dog" shaped target, like two cupped hands clapping together. Perhaps there could be two wave-fronts which could converge, trapping a portion of the target into a critical mass density. (not to be confused with the highly disputed bubble fusion done at room temperature)
    - What about creating the target as a super-cooled Bose-Einstein condensate? This could get the nucleuses really close together where they would be already in proximity for fusion, but it is unlikely you could do a sneak attack on them and not disrupt the cloud into a normal gas. The cost of super-cooling may not be worth the payback energy produced.
        - http://en.wikipedia.org/wiki/Bose%E2%80%93Einstein_condensate
- Feb 2020 see Boron Hydrogen laser targeted – nobel prize guy
- 2021 – would like to document all of the previous and current fusion test facilities, technologies etc in WordPress doc with links
- 2023 – start with
    - see Wikipedia List of all fusion reactors built to date – it is growing but still sketchy areas
    - Add my own columns, with major and minor classifications like
        - The major division is between magnetic confinement and inertial confinement.
        - Nice tables for these three categories
            -
    - See at the bottom very preliminary three sections:
        - Z-pinch
        - Inertial electrostatic confinement
        - Magnetized target fusion
            - FRX-L
                - https://www.fusionenergybase.com/project/frx-l
                - High-Density Field-Reversed Configuration Plasma for Magnetized Target Fusion
                - Fusion Energy Base provides information on organizations involved in fusion energy, their projects, funding, and results.
                - MUCH BETTER THAN WIKIPEDIA!
                - https://www.fusionenergybase.com/
                - https://www.fusionenergybase.com/projects
                - https://www.fusionenergybase.com/organizations
                - Under Projects there is an Approach column…see also Concepts which do not appear to have a separate tab but it would be another good dimension to add
                - Fusion Energy Base was started in late 2019 by Sam Wurzel. As of February 28th, 2021 site updates are paused until Fusion Energy Base transitions to a new owner.
                - https://arpa-e.energy.gov/about/team-directory/sam-wurzel
                - Advanced Research Projects Agency-Energy (ARPA-E)
                - https://arpa-e.energy.gov/about
            - FRCHX
            - General Fusion – under development (Canadian Vancouver)
                - July 2022 - General Fusion receives two funding awards from the U.S. Department of Energy to advance its Magnetized Target Fusion technology

2011 - Electro-Dynamic Tether for non-fuel Satellite Propulsion

Aug 31, 2011

- There is a multi-page document for this one
- Dec 2020…copied most of it in here. Need some drawings

- This is a new deployment methodology for the existing electrodynamic tether which can move satellites in space with no fuel, out to about 2000 kilometers from Earth
- As far as I have seen, all space tether experiments to date have used some deployment method to keep them stretched out in a straight line (see NASA STS-75). This required a complex deployment pod and scaffolding. Or they are limited to being vertical to the Earth due to the natural effects of gravity.
- The method presented below is claiming to be a new idea whereby rotating multiple tethers like a helicopter blade using centrifugal force, the scaffolding can be eliminated, and the cost and weight of deployment can be reduced dramatically.
- The idea is to have two (or more) tethers spooled out in two segments at right-angles to a rotating shaft.
- Un-deployed, the tether wire is contained on two spools on opposite sides of the main shaft.
- Further out on the shaft is a counter-rotating flywheel, with an electric motor that sits between them, its axis also along the shaft.
- To deploy, the motor starts, which is powered by solar panels/batteries on the satellite, and the spools release the two tethers. The rotational inertia spins them out until they are fully deployed, at a distance to be determined by the optimal design for the specific application.
- The flywheel counter-rotates, so the net rotational inertia is zero, and the satellite maintains its steady position.
- The tethers would have weights at each end in the form of an electron dissipaters / collectors.
- Electrical current would be induced to flow through the system while the tethers swing through approximately 30 degrees, or 1/12 of the time. Thus the traction force vector would go through a repeated curved segment.
- When one is collecting, the other is dissipating. They are controlled independently so that in the event that one fails, you still have half of an operating system.
- The fact that the tether is only operational for a small percentage (15%) of the time in each rotation is intended to be offset by the fact that the deployment apparatus (spools, shafts, and flywheel) is only a small percentage of the overall payload weight of the system, and in comparison with previous deployment methodologies, and could thus still potentially be practical an economically feasible.
- In order to reduce the speed of the flywheel, it may also use two or three weights which are spooled out in the same fashion, but far enough out on the extended shaft and not too far out in radius for the possibility of the counter-rotating wires to get entangled.

- The plane of the spinning tether would typically be oriented to cut through the center of the earth and co-planar with the orbit's plane. This way, the timing of the induction sequences could be such that the craft could be lifted, dropped, moved forwards, or backwards at any point of the orbit. It is my understanding that existing tethers can only operate in a stable fashion to lift or drop, and not restore inevitable orbital decay due to drag in the ionosphere. (further research required here....perhaps only up and down is required relative to the Earth's center if timing is correct, but this would still require static tethers to be swung through 180 degrees, something that is automatic with the rotating system)
- Eric Meger of exactEarth (COMDEV) who created the first broadband satellite, informed me that due to the gravitational stability, the co-planar intersection is the only self-stabilizing solution currently envisioned – more here later...
- The deployment arms of the two spools could be canted back at say 120 degrees to the shaft (and micro-adjustable with motor driven threaded rods) such that their mass would be situated about the center of mass of the satellite (including the flywheel). This way, the traction force created by the tether would act on the center of mass of the overall system and not create skewing forces.
- The speed of rotation would be just enough to keep the tether tight and counteract slack generated on the end which is currently pushing (call this the "trailing tether"). This could also be controlled by reducing the current flow in the trailing tether dynamically...just enough push to not slacken the tether. Tension could be measured with a strain gauge at the vehicle end of the tether providing the feedback.
- The entire assembly could thus be bolted to the side of a satellite, or a completely new satellite could be designed with this as a core propulsion system for a specific set of missions, like hopping from one piece of space junk to the next to gather them up and fling them to Earth.
- Re-deployment and re-positioning of the tethers would require reverse operations and retracting the devices, then using the on-board satellite momentum wheels to re-orient the position to potentially any orientation and re-direction of the propulsion.
- Induction sequences could be done when the local ionization levels are within operating tolerances with respect to day and night conditions etc, and particular missions to re-position the craft to a new location/orbit would have to be recalculated on the fly. Rapid changes in solar flares would have to be monitored and protected against (was this what killed STS-75?)
- Possible problems would include:
- Old fashioned wheel-balancing problems: run-out detection within the inertial frame of reference monitoring could control the spooling of each tether independently
- Tether wire breaks! Use a carbon fibre band (like in the proposed space elevator), to take the tension, and/or in combination with insulating some of the wire on the inboard sections to optimize. Another solution: tether wire is a multi-strand fishnet stocking like structure which all conducts...
- Frictional problems on the shaft causing non-net-neutral rotational independence from the craft. One solution would be another mini-tether on the flywheel at right-angles to the shaft, so as to not require the satellite on-board momentum wheels to increasingly speed up to compensate. (This could also be used to de-spin them). I have a potential design for this but left out for the moment.
- Economics: you need space missions where the cost of this additional component system is cheaper than fuel-based systems, and the overall payload weight is a small enough fraction. Could this keep a space-based telescope up longer?

2011 – Garbage Disposal Divertor for Composting

- Added December 19th, 2022, 11 years later, will be making an outdoor version in 2024
- Most composting of vegetables results in big lumps of food that take considerable time to decompose. Garbage disposal units do a good job of grinding up kitchen scraps but then they get rinsed into the sanitary sewers. (Americans never heard of garberator, so don't use the term)
- This invention adds a control at the kitchen sink to divert the ground up output of the garbage disposal unit and the water flow into a collection tank where it is accumulated and can be easily removed periodically to be added to a compost pile.

- the following considerations need to be incorporated into the various design options possible:
    - have the flow go outside of the house where it does not involve mess and spilling, for example under a sink or in a kitchen. Outdoor freezing is an issue in the north
    - The rinse water could optionally continue on down the sewer with only the solid particles being strained out
    - The ultimate would involve a complete redesign of the kitchen sink/food preparation area, because most plumbing already has a minimum amount of additional drop available for the drains (1/4 inch per foot).
    - In must meet building codes, and if water is to go back into the drain, it needs a separate trap to isolate from other appliances and sewer gas etc

2011 – The World from Inside – Science Center Interactive Display

- Added January 21st, 2024 but thought up around 2011.
- This would be a globe of the world about 30 feet high. If it was at the Toronto Science Center, then it would be oriented with Toronto right at the top, and polar aligned as well. So the scale would be about 1.5 million to 1.
- There would be steel latitude lines at the equator, and tropic and polar lines, and 24 longitude lines. The oceans would be clear open space, and the continents solid panels.
- So someone walking around the base (an area about 200 by 200 if outside?) would get a perspective of where each continent or city exists in relation to us.
- There would be walkways through the globe at various levels. At the very top on the inside you could see each country where they are in relation to you. Perhaps a walkway up and over, with a peek hole at the top on the outside.
- So Toronto would be about 3 centimeters or about 1 inch on this globe. This could be a tiny little map of Toronto and an arrow "you are here!" (of course a tiny CN tower). Kids could crawl up to it with magnifying glasses.
    - https://www.toronto.ca/city-government/data-research-maps/toronto-at-a-glance/#:~:text=Located%20on%20a%20broad%20sloping,perimeter%20is%20approximately%20180%20km.
    - "Located on a broad sloping plateau cut by numerous river valleys, Toronto covers 641 sq.km. and stretches 43 km from east to west and 21 km from north to south at its longest points. The perimeter is approximately 180 km."
    - CN tower 553 meters or 1815 feet would be about 1/3 of a millimeter
- The continent panels would be done with the natural earth colours on the outside, and at night (or every few minutes the room lights would dim way down) and the cities would light up with fiberoptics. On the INSIDE of the globe, each country would be coloured so that they could be seen from the special observation window on top, or when walking through the globe walkways.
    - (see also Google Map enhancement upgrade idea to colour countries etc.)
- One of the purposes of this exhibit is to show that we all live on one very interesting and precious planet.
- Some of the clear ocean spaces could have say a hurricane shown to scale.
- On the inside in an area where there is no continent, like the pacific ocean would be a big cone about 5 degrees showing the core of the earth.
- Copies of this display could be made in other cities in the world, and they would all be thus aligned the same.

2011 - Sell 24 Carat Gold Mini-Cubes

Oct 1, 2011

- Buy gold bars, melt them down and cast various sizes and shapes.
- One ounce has about 1467 cubic millimeters
- This is about $1.16 per cubic millimeter at $1700 CAD / oz.
    - $2,725 Jan 21, 2024
- A 4mm cube or 64 cubic mm would be worth ~~$74.15.~~ $118.88 CAD
- I think this would be quite a popular item.
- Could be sold as "jewelry" with posts to make them earrings
- Cost to manufacture xxx

- plus markup yyy
- selling price zzz
- a cheap way to own and accumulate gold at an entry level but a problem for counterfeits and knockoffs
- I sold my 1 ounce for $1300 in about 2014.
- one "Good London Bar Delivered" is about 24 pounds or $600,000
    - Jan 21, 2024 400 oz bar $822,060 USD
- http://www.onlygold.com/faqcenterpages/faq_legalissuesandgold.htm

2011 - Microsoft, Apple, VMware appliances for DOS/Apple II

Thu Oct 6, 2011

- In honour of Steve Jobs who died yesterday, I thought it would be really cool to help the legacy of what he and others built over the last 40 years to live on. In 2010, Google put up pac man in their banner one day.
- In VMware, you can build virtual machines as appliances. This could be a fully functional Apple IIe with a whole bunch of the old Snack Attack, Pac Man games etc. Not sure if royalties are an issue, but there is always the possibility of getting Nintendo and others to buy into the idea and perhaps sneak in some advertizing for their most recent products. It could also be an opportunity for VMware to have a free limited verson of WorkStation.
- I am going to try posting this in a new site
- Also, I have a bunch of Apple II tokenized basic code that needs to run native

2011 - Sent to Google – Transistor singing "When I'm 64"

Thu Oct 6, 2011

- Idea for Google banner on their search screen ....Nov 17, 2011 Perhaps an animated transistor could dance around singing "when I'm 64..."
- http://www.google.com/support/contact/bin/request.py?hl=en&contact_type=bizdev&rd=1
- Reply:
    - from bizdev@google.com
    - to davebright55@gmail.com
    - date Thu, Oct 6, 2011 at 5:14 AM
    - subject Re: [#884732718] BizDev Contact Form
    - mailed-by trakken.google.com
    - signed-by google.com
    - Thank you for your note. We receive a great deal of email and are not able to personally respond to all proposals. A Google representative will be in touch with you shortly if we are interested in exploring your proposal. If your email is not related to business development, we encourage you to submit your message through the online contact form at http://www.google.com/support/
    - We appreciate your interest in Google, and thank you for taking the time to write.
    - Regards, The Google Team

2011 – Floor Stripping / Cleaning – Fume Control

Sat Oct 15, 2011

- Office Depot floor sucks with wax build up. Ammonia would clean it up very easily. I mentioned it to them one day but the guy never got back to me. (2020…you were always such a great sales guy Dave…coming down from Mars with fantastic ideas)
- Same with Home Hardware hallway in front of CEOs office.
- Now the Parkhouse in Goderich has a job that would require wood stripper on the floor. (2017 new floor…lost my chance)
- The problem is the strong smell of ammonia or strippers. When do you do the work?

- Have a centrifugal pump outside sucking out the fumes (the motor would be spark-isolated from the exhaust).
- The pump could be like the ones dad and I made for pipe organs.
- Inside you have a square frame about 2 feet by 2 feet with the operator outside, or bigger with the operator inside and a mask.
- Another invention, not documented yet…a floor sander that has several rectangular plates that oscillate linear fashion with the grain.

2012 – Florida Water Cisterns

- Sunday, January 15, 2012 – emailed to Jay Wetherill
- The idea is to collect rainwater and pump it up into tanks in the attic to be used to gravity feed flushing of toilets and supplying washing machines, thus saving on wasting good clean drinking water currently being used to do this. Optional pressure tank and pump may be needed.
- In Florida, I did not see a lot of eves troughs at the edge of roofs. At Tall Pines, water runs off the roof directly to the ground and into gravel. These may be against building codes due to hurricane building standards with more dangerous junk that would be blowing around, and plus insurance costs to fix it.
- Many times it appears that there is gravel below the eves to handle the dripping water. So dig up the gravel in a one-foot wide section, put some thick black abs plastic sheeting down in a shallow V shape, funnel it downhill into a cistern that is dug in completely below ground level, cover it back up with gravel, run it into a cistern tank, say about a 4 foot square and 2 feet deep (32 cubic feet). On top of the tank you could have a shallow garden planted, somewhere that you would not run a riding mover over etc. Easy access to an electric pump inside. Need to filter water where it goes in to the tank.
- An electric water pump is inside the tank, powered by a solar panel. It pumps water up into the holding tank in the attic. It can be fairly small. Basically a totally green solution. Free water, free pumping energy.
- The tank in the attic can even be made to fit the shape of the attic. The first thing you would do is build a cheap 3/8 inch plywood tray under where the tank would go, well braced, and sloping, with 10 mill poly and into a drain. The tank would be built above this, so if there was ever a leak, it would drain outside the house. The tank could be open at the top with a loose cover for easy access for cleaning and getting to switches.
- You could first plumb in your toilets to this system, then to washing machines etc.
- Water would first be pumped from the cistern in the yard.
- There would be water-level switches inside the tank. Say the tank was 24 inches deep:
    - the “FULL” switch near the top would be at 20 inches
    - the “NEED MORE WATER FROM CISTERN” switch at 18 inches
    - the “NEED MORE WATER FROM CITY or WELL” switch would be 15 inches
- As long as there was water in the cistern, it would refill from there when it dropped below 18 inches.
- If the attic tank was empty, then you would drop to 15 inches and you would top up with city water.
- This may work for flushing toilets, but not enough pressure for say a washing machine to load, so optionally, you could add in a pressure tank that would get topped up from the attic tank first and then city water secondary.
- With a pressure-tank solution, you may even be able to eliminate the whole attic tank system???
- Cost – benefits all to be considered with pay-back calculations.
- Sent to Jay the same day!!! (2020 why would I do that…he would not give a crap)

2016 – Floor Sander – Vibrating Plates with the Grain

- Sketches somewhere, six sand paper plates say 3x18 makes 18x18 plate, 3 alternate go forward, the other 3 go back
- Throw adjustable from 1/8 inch to ½ inch

- 20x20 vacuum hood
- Cam shaft/bearings/electric motor on top for weight
- We got John McMahon to do our floors in 2018, $4000

2016 – Dentistry - Tooth Extraction - Gauze Improvement

- Adding this entry 2023-Aug-12 after getting second titanium implant, but it was thought up around 2016. I have discussed this idea with at least my current dentist Dr. Scott Russell.
- When gauze is placed up against a fresh dental extraction, I believe the number one reason is to soak up blood until the clotting stops the bleeding. This is idiotic. The problem is that the developing clot almost always becomes interlinked into the gauze, so when it is removed, the entire clot is pulled out and you are back to square one. And before long, you may have contributed to the statistic that about 2 to 7 percent of extractions end up with a dry socket (see link below). It happened to me on one of my extractions. Perhaps it was my last one for the implant in 2019, I was adding a patch of clear shipping tape to the gauze where it came in contact with the clot area, so the gauze could do its job soaking up blood, but the smooth tape surface allowed for a clean release, leaving the clot behind.
- I think that there are a couple of products that need to be developed that could potentially cut the number of dry sockets in half, as well as promote more and better gum regeneration. (there may be patents involved and money to be made!)
    - One product would be a gauze that had one whole side of it covered with a thin flexible plastic membrane (like those skin-like membranes for covering bandages) that would get pressured into the surface of the wound. Some advantages:
        - 1. seals off blood flow better than gauze which is inherently leaky and as mentioned, a “clot grabber”. (yes, soak up the excess blood, but leave some behind in the right place to do its job!)
        - 2. Releases easily from the developing clot, where a fresh dressing could immediately follow
    - The second product would be just the film itself which with a sticky side and could be added to any gauze cut to a custom size and shape to fit the particular area of surgery. This may prove to be tedious or time consuming in practice…perhaps just have a thinner version of the precoated gauze (i.e. various thicknesses) that could be cut to size and sandwiched or put under a larger piece of regular gauze.
- A more advanced version of the product could be developed that release chemicals that promote tissue re-generation. As you know, the miracle of healing tissue (gums in this case), is all about creating new capillaries that connect back up with existing arterioles and venules until a new chunk of gums is created with normal blood flow. This all occurs within the clot. I suspect it is far easier to grow new capillaries starting at the artery end of things where fresh blood is being pumped out. I have no idea how on earth these find their way to reconnecting and feeding into the vein side of the equation. Some links below that I have not finished reading…:
- DRY SOCKETS
    - https://www.dentistryiq.com/dentistry/oral-maxillofacial-and-surgery/article/16367785/dodging-the-dreaded-dry-socket-tips-on-preventing-this-painful-possibility
    - zinc oxide (ZnO) eugenol dressing
    - chlorhexidine rinses
- Mammalian Heart and Blood Vessels - Arteries, Veins, and Capillaries
    - https://bio.libretexts.org/Bookshelves/Introductory_and_General_Biology/Book%3A_General_Biology_(Boundless)/40%3A_The_Circulatory_System/40.10%3A_Mammalian_Heart_and_Blood_Vessels_-_Arteries_Veins_and_Capillaries#:~:text=Capillaries%20consist%20of%20a%20single,(collagen%20and%20elastic%20fibers).
- NIH - Principles of Wound Healing
    - https://www.ncbi.nlm.nih.gov/books/NBK534261/

2019 - No Stopping Traffic Highway Repair Platform

- I had this idea for several years, inspired by the scary drive portion of Interstate 75 through Detroit area and the big patches of missing concrete. Not intended for rebuilding, but for patching and repair and extending the life of existing roads
- Have steel plates that lock together, one lane wide and say 20 feet long, so that you could cover three lanes wide and 100 yards (45 sections in this case).
- These would be sitting above the road about 18 inches on many legs each, and the leading and trailing edge would be a ramp that you could drive up and over
- May 19, 2020: Platforms would be one lane wide and sitting on multiple axles and standard truck tires (used tires could be used that are no longer good for high speed). Drive them right into place, the vehicles just drive over them. Jack screws go down on pads to take weight off the tires and level, an electric motor goes along underneath in a couple of passes with torque measuring to give equal pressure on each plate.
- Traffic would be slowed down to go over the section but would not stop or require lane changes or closures
- All repairs to the road surfaces would be done with automated machines that could grind concrete, lay rebar, and pour concrete. Workers could drive around on flat cars like mechanics use but build safer. Access underneath would be open all along each side which would also have guard rails to keep traffic from going off
- The whole system could be set up and then advanced down the road dynamically even when traffic is going over it.
- The steel plates, say ¾ inch thick, would sit on open-web bar joists about HMMM need room
- Special vehicles would be designed that drive and drop the whole works into place in minutes.
- Another related invention is one that grinds out and re-paves over railroad tracks feathering in to the existing road and using the rails as setup guides, but not interfering with passing trains other than for brief operations
- 2020-12-13 saw big flatbed by goderich rail yards with 8x8 tires at the front and 8x6 at the back, all hydraulic, huge transformer 80 tonnes, the whole rig follows the contours of the road!
- Dec 2020, use old truck frames, knock the trailers off, make flatbeds out of them, add axels, and steel plates on top would swing out over the sides to overlap to the other joined trucks like fish scales in the direction of traffic. The whole linked three lane assembly could go around highway curves and the plates would slide. Tires would take the weight of the above traffic, but if too heavy this would squish down an inch to solid legs which could easily flip up when advancing the whole train.
- Initial parameters: Lead on ramp: three trailer lengths 50 feet each, up one foot each to a three foot height, another 3 for the flat section where work would be done, 3 more for the offload ramp, = 450 feet total, 27 trailers

2020 – Wingsurf Goofy Foot Fix – Drawing Board Only

When surfing on a hydrofoil in one direction, when you tack to go the other way, it is almost impossible for most to switch their feet to the opposite position without crashing. As soon as you take your weight off of either foot, you will nose up or down and be laying in the water in half a second.

- This invention allows you to unweight and quickly move your forward foot back and your back foot forward by having both foot straps on a common turntable which has its axis vertical and almost through the board.
- A thin strong carbon fiber plate carries both foot straps which also can rotate 360 when unweighted. Perhaps these could also move in their own tracks a few inches
- Before or after you come about, you then unweight, and spin the turntable to the other position. Because you do not have to come out of the footstraps, the plate and axis of the board will prevent it from quickly tipping

2020 February – Hierarchical Document Website Reader / Authoring tool

- Starting to use Wordpress again, frustrated by the lack of ability to create an online interactive user experience for intended users
- Nov 26, 2022: expanding some content here, going through all inventions to clean this doc up then start pumping them out on wordpress one at a time and tweeting and building followers and interests in science and inventions
- Jan 29, 2024 splitting of a related section… see next: web page dictionary extraction tool
- It would be an over-arching organizational container and tool for organizing information into a hierarchical tree, table of contents, and folder like structure with multiple levels
- In one form or application, a university student could have a paid textbook provided by the publisher in a printed but also electronic form. click it to expand table of contents ONE LINE EACH and NO PICTURES OR GRAPHICS bigger than text (icons ok), and each section. Sub-sections could be expanded and show indented about three characters. When you click on a Windows folder, it opens the folder and you loose sight of where you came from. If you get too deep into a sub-folder, you could window the higher level folders to the left without loosing your columnar control data
- provide an expandable tree on the right 2/3 of the screen, but any number of columns on the left side which could be selected in standard packaged views which could be copied and modified into user-definable views
    - see 2022 ideas for example, number of times viewed, last time read, need to re-read, flag for terminology extraction, see 2022 below for database items…
- a new and improved way to store and present information and content
- could be considered one of many new "forms of literacy" (compare to evolution through the ages
- This would require the development of a new or extended HTML or XML based object type that could exist either on a person's phone or PC, or in the cloud
- Want to have top-level pages compressed with as much information possible in view at one time, text only with perhaps tiny icon pics or colour blocks or labels inline text
- These could be HTML generated as static pages, or driven by a database with a custom reader
- Strict Indented hierarchical structure with collapse and expand functionality, optionally showing number of leaves below
- see 2010 Blackberry Menu ideas (which were rejected by software designers of Blackberry in Waterloo when I was discussing at coffee after PMI meeting!...their tablet was TOO LATE)
- see 1991 Dashwood Bill of Materials dynamic hierarchical product structure
- See Microsoft programming objects which could be used as a basis and copied and or extended
- Dec 2022 additional ideas
    - Think of a table of contents in the form of a hierarchical indented list. When programming, coders deliberately do this indenting, traditionally three characters for each level, and matching IF THEN ELSE or DO ENDDO bracketing
        - This is the same as bulleted text right here, with arrow key to indent etc
    - Now the whole structure would be made of these single rows, each being a relational database style record, with the level of indention being numbered 1 for the parent, 2, 3, 4, 3 to go back etc
    - None of these "records" would be considered content, only as table of content entries, and the TEXT portion would be limited to say 50 characters which could contain emoticon like blocks but all restricted to a standard line height.
    - Once you expand a LEAF (a level with nothing lower) then you can see content, or at least a controlled partial window of it
    - The database would have fields (columns) numbered 1, 2, 3, etc and would never change, since authors using the system would not want changes happening to the look of their document, and programmers would want backward compatibility even though new columns would be added on a continuous basis. Rather, additional, or new improved features could be added as new fields
    - The author would determine which fields are presented at a particular level with VIEWS, and that would apply until you pop back out of that level, where a different set of

attributes could be used in a lower level overriding VIEW. So a large document with 6 levels could have flexible formatting within.
        - If you are drilling down to a 5th level in your content, you may be presenting the "Kings of Europe", and be including column 125 Date of Birth and 126 Date of Death 127 Country of Birth etc (of course these columns would only be populated optionally). GPS Coordinates etc (need to start a list of these)
        - Also, the database may be a combination of columns, with optional meta data in the form of tags, or #hashtags, #attributes etc within variable length records or BLOBS
    - Editor would allow rows to be inserted at the same level as the above or below line, then clicked to indent right
    - The entire "publication wrapper or container" would have a specific number of records
    - Example fields would include
        - Mandatory Text/Graphics String, newly added could get '+++"

- Jan 2023 additional ideas
    - Just learning about ChatbotGTP and how Google is now in a panic to catch up! Cofounded in 2015 by Musk and Microsoft etc, OpenAI. Consider this approach to doing research where you ask a bunch of questions, put down some directional parameters, and have this Artificial Intelligence created article authored for you. Google is suddenly loosing its relevance (I just sold my shares Jan 24)
    - Now compare the new Chatbot line of thinking with the original Webcrawlers (actually a lot of the first code came out of University of Waterloo!). See Wikipedia for good article of this evolution, now totally dominated by Google, but having turned into a shitpile with clickbait and advertising.
- The pros and cons of Wikipedia:
    - Think of each page in Wikipedia leaf, but the entire collection like all of the leaves in the forest in November, in a giant unsorted pile.
    - Sure, each page is sometimes nicely linked to numerous others, and the hovering to links is beautiful, but there needs to be a way for any joe blow to create their own "focus page" or "authored articles" which is a combination of their own personal work but dynamically linked to any other selected work. So then you can become an "author/curator", leveraging others work dynamically. You are the author of your own content, but leveraging the work and content of others by blending (AI is doing this automatically, fine, but my proposed authoring tool would "allow a human to be the principal driver, even if for part of the journey"
    - There is no blatant or distracting advertising or clickbait that slows down the reader, only occasionally their interruption for fundraising. Little windows off to the right that don't fucking blink perhaps…
- So ultimately, a student, researcher, or "digital curator" ("content creator") could
    - open their electronic textbook (or start with any web page like a scientific paper)
    - create a personal "Dave, Version 1" framework/container with the textbook or web page as a root
    - now you can extract the hierarchical table of contents, and start annotating your instance copy, adding other website links.
    - The result is the entire original book's table of contents in hierarchy, (or two or three books merged) then each leaf or entry in the TOC can be deselected, flagged, commented on, etc.
    - Now that you have your customized view, you can do various operations with it: ripping tool to extract terminology (Jan 29, 2024 split this off to a new section/invention idea)

2020 February – Web Page Dictionary Extraction Tool

- Jan 21, 2024: adding this as a section split off from Document Reader above

- Run an extract that rips out all of the terminology in all pages that have been selected (using some form of Web Crawler logic … see wiki focused, semantic and academic crawling, freeware), and dumps it into a database, one record per word with link to source, and create an alphabetical dictionary of terms. So if you are a student studying virus binding epitope sites for antibodies, you would have a big pile of terms. Now you may already have another personal dictionary of terms subsets already stored, and you could match the two and click any newly found terms, links etc. These would be date stamped, you could click "already read" column, or "re-read", add a note etc. This process could be run manually while you watch with click include, go deeper levels, skip options. Basically, a Google extract process not for generating ads and corporate profit, but for individuals to leverage. Democratization of technology.
- Root level dictionary of terms as an object type containing the following:
  - Local and uniquely edited individual terminology definitions (if copy and modify give credit or reference original document)
  - Links to Wikipedia or Websters Dictionary etc
- https://open.cs.uwaterloo.ca/web-programming/

2020 – March 9 – Chandeliers Cut Crystal and Fiber Optics

- Use cut crystal or make it myself like they do in Czechoslovakia
- Fiber optics go to a control box at the ceiling with optional coloured LEDs, moving rainbow effects etc
- Tear drop crystal hangs down with custom tip facing up faceted that is glued to a fiber optic thread that the crystal hangs from. Perhaps also have wire hanger off-axis

2021 – Google Maps Colouring Countries

- Entering this January 28, 2023, but thought of it a couple of years ago
- Create some way to interface with Google Maps and Google Earth so that a user can copy, modify, and create their own personalized list of countries and be able to assign colours to them.
- This requires knowledge of how Google currently stores its definitions of political boundaries, and how the visual interface and ability to select different layers works (like satellite view vs road maps etc)
- This could be accomplished in two ways: using Google Maps in its current unmodified form and figuring a way to hack or intercept the images presented, and merge in some colour on the fly, or ultimately the best solution is to sell Google the idea and have them incorporate it into their base code. Here is how I envision the way it would work:
  - The user would click on the google maps layers icon: Currently
    - Map Details has: transit, traffic, biking (another idea of mine 2010), terrain, street view, wildfires
    - Map Type: Default and Satellite
  - The added functionality would be "Political Annotation" and include
    - Colourization of political borders and surface areas
    - Default Google supplied colourization schemes or
    - User based colour overrides
- Political boundaries
  - The default would be to create maps and globes that look like the old "countries of the world"
    - Colour countries only. Colours picked to minimize touching boarders of the same colour
    - Option to show states, provinces, regions within countries
- this could evolve into a fairly sophisticated level of enhancement, taking Google Maps to a whole new level
  - During a USA election, you could zoom in to a State and see the voting areas(?) Congressional Districts

    - Countries in the the EU, countries in NATO, countries in the Commonwealth, languages, religions etc
- Other considerations
    - The order with which the final presented view is created is important. The problem with MyRadar for example, is that during a hurricane, the wind and clouds are added OVERTOP of the names of towns, so you cant see shit! The names of towns and villages, and boundaries and borders need to be laid down last!
    - Colourization can be laid down using 100% fill colour, or diminishing down by percentage of blending to say 15%, so you could blend it in to a satellite view
- Jan 31, 2024: Current State of Google Maps could be further investigated
    - I discovered Transit this month when looking for the subway stations in Toronto… "Layers: Transit Traffic Biking Terrain StreetView WildFires Default"

2021 – Ad_Free_Tube … YouTube without Ads – shared by users

- www.adfreetube.com was not found
- Any user can search the AdFreeTube
- Democratization of the MONOPOLY that Google and YouTube has
- Educational videos for teaching, especially children, should not contain the distractions of advertising….they get enough distraction as it is already and the attention span of people is very short in this high tech age….I used to do 8 full hours of cabinet making in 1980 and was not allowed to talk to co-workers unless I did not slow down my pace
- Contact owner of Tumbler?
- Can you pay Google to eliminate the ads per viewing?
- Host users can dedicate some of their storage on their PCs or larger server farms to both hosting content and sharing of indexing
- Advertising is allowed but in a controlled fashion where the USER not the HOST has full control of IF they want to see the ads, NOT requiring to skip the ads,
- Indexing of content can be replicated on multiple computers and also shared

2021 – Goodyear Blimp replacement for Golf Cameras

- Rather than use a drone which requires a battery or power source, have several helium ballons on tethers that can be raised in multiple locations around a championship golf course
- Each one can easily brought down like a fishing rod. First there is a larger mini-dirigible, then a 30 foot or so adjustable tether to a smaller pod holding up the remote camera with steady shot technology, or even landing pad for drones and recharging.
- Goodyear Wingfoot is current technology
- https://www.goodyearblimp.com/behind-the-scenes/current-blimps.html

2021 - Home Inspection: HVAC Air Quality Energy Insulation

After working on Sylvia's fresh air input, and three old houses over 9 years, I realize there is a lot of houses out there that are totally screwed up!

- A detailed example: With Sylvia's house, you could have a dryer and two bathroom exhaust fans all running (70 cfm each – 210 cfm), and potentially the furnace is off and both the downstairs gas fire stove and upstairs gas fireplace running. Now that the house is much tighter, this is a guarantee that back-drafting will be happening in one or both units (thus the 6 inch fresh air intake pipe). The only way to really tell is with a Manometer to measure the pressure differential of the inside of the house to the outside. Professionals use blowers on a door and FLIR cameras, especially good in the winter when you can detect where heat is being blown out of the building, there are your cracks!

- A general list of services:
    - Air transfer in and out of building:
        - Inventory of active and passive portals
        - Air leakBlower test and FLIR heat sensors
    - Water/Humidity transfer in and out of building
        - Condensate lines A/C, Furnace, dehumidifiers
        - Sump pumps
        - Water spill detection
        - Sewer fitted drain pans: washing machines, water heaters
    - Air and Heat circulation within the building
        - Forced air heat and A/C
        - radiant heat, in-floor heat natural gas boiler
        - circulation fans: ceiling, crawl space
    - Insulation and vapour barriers: attic, walls, crawl spaces
        - Outside wall heat gradients, humidity and vapour lock
    - Smoke CO detectors
    - Security systems: Wifi cameras etc
    - WiFi and control systems: thermostats
    - Money saving, Energy consumption and monitoring (beyond the hydro and gas meter)
    - Solar Panels
    - Certifications: Home Inspector, HVAC? Etc
    - Partnerships: HVAC, plumbers, electricians, manufacturers, associations, town fire chief

2023 – Interior Barn and Pocket Doors

- Vmatch panel barn doors made to order amazon, design configurator.
- See Sylvia's basement.
- Good indoor work for bad weather days, could do in florida

https://foreverbarnwood.com/products/rustic-barn-doors/

https://www.theamericanslidingdoor.com/sliding-doors
https://customslidingbarndoors.com/

2024 – Mars Colonization – Spacex – Spin Room

Had these ideas for a long time but Elon Musk is actually talking about it.
The problems and some solutions for living on Mars for an extended period:

- **Atmospheric pressure**
    - First colony using several space ships after landing, lay them down like spokes with central hub connecting them for separate sealing and ability to quickly move from one to another in case of loss of pressure
        - Three ships land in a triangle, tether each to the ground with one cable, then three cables top triangle gives you a sky crane capability
        - Moveable rail tracks for relocation of additional ships or heavy loads
    - Dig down deep enough and/or pile on dirt enough to keep 15 psi rooms

- **Artificial gravity with spinning rooms for 1g**
    - Vertical axis shaft with top bearing and bottom thrust bearing, swing arms, faster or further out on each arm = more gravity, automatic "wheel balancing" to compensate for shifting weights
- **Cosmic ray and radiation blocking** by creating a roof: dig down and/or pile up: using a combination of local water and mud and polypropylene mesh, polyurethane foam for insulation and structural strength, and repurposed materials from landed Starships
- **Energy:** Nuclear reactor for energy, fission, fusion some day, solar panels
- **Robots:** to do work
- **Hospital/Safe rooms**
- Look for a location perhaps polar with source of water
- Large transport device instead of rails for long haul
    - Three big cable spoke wheels with hydraulicly adjusted feet for smooth level transport

2024 – Better Movie Database than IMDB

- After watching 10 minutes of Bullet Train, the idea came back to me of a better movie database filter.
- The movie industry has gone totally WOKE and Netflix etc are all trying to slip in LGBQT shit
- I would like to create a simple FLAT DATABASE of all movies that would be publicly updated like WIKIPEDIA and anyone could download it as an EXCEL. There would be a second relational table with movies and actors, and a third with actors.
- There would be columns like title, year, etc, but other filters
- I want to have additional fields like how many times a gun is fired, a person is shot, a person is killed, a dead body is shown, a gay or lesbian reference is made, count of the top 10 swear words,
    - Have a local personal database that you can download, synch and re-update, flag when you watched it, personal notes
    - The industry PG13 and all that crap is useless for filtering out lesbian and gay crap which I may not want to see

2024 – Underwater Molecule Builder

- This would be like a ribosome machine that would assemble little coloured spheres, each representing the various atoms on the periodic table.
- A hydrogen atom could be the size of a ping pong ball.
- Each would weigh the same as water, and some way to create bonds would be dreamed up.
- So the assembled molecule could float in a big tank.

Thought Experiments

This contains theoretical ideas only, that would not lead to anything ever being built. Theoretical physics etc.

2003 A Finite Universe – Hypersphere

- A few aspects here:
    - the topological mapping and symmetric wrap-around of 3D and some sketches
    - the finite size which could be say 1 billion times bigger than our visible universe.
    - The ever accelerated expanding and shrinking of mass in any given "visible universe bubble" within the whole universe
    - The possibility that any bubble could have different total masses, and even slightly different or "non-universal constants" like the speed of light, the percentage of dark matter and energy, the Plank constant

- This is how regular three dimensional space COULD actually not go on forever in every direction, but loop back on itself, with no center, or every point in the universe being the center of mass within smaller visible universe bubbles.
    - Think of sugar cubes stacked going out to infinity in all three dimensions (or six arrows going in both directions)
    - OR, think of ball bearings in a hexagonal close packing, if you make them out of soft material and squish them together they end up as rombic dodecahedrons with now 12 arrows pointing out symmetrically from the center, I prefer this because they are more like spheres than cubes are, each representing a local baby universe
- The mapping is quite simple, and I believe is known as a hypersphere.
- During the big bang there was hyperinflation, so our visible universe would be only a small percentage of the whole thing.
- If you look out let's say 9/10ths of the way in a straight line to any part of our universe, and see a galaxy that is red shifted so we see it as it existed 12 billion years ago, the matter in that galaxy still exists today and could have creatures like us, looking back at the early Milky Way. Just because the light is only just arriving to each other, that does not mean that perhaps that distant galaxy has not actually even disappeared beyond our current bubble. Does the effect of the gravity of that distance galaxy travel to us at that speed of light along with the photons, or is it's effect instantaneous, like "spooky particles entangled"?
- Some background on my inspirations
    - I Met with John Moffat about this during the opening of the Perimeter Institute in Waterloo Ontario (October 2004 I think). He actually took me into his office and we talked for half an hour about this at a REAL BLACKBOARD WITH CHALK, while dozens of people peaked in through the window from the hallway. The co-founder of Blackberry Lazerus donated something like 100 million to this place, and quantum computing etc. John has been working on a theory about the variable speed of light based on the unexpected results that galaxies rotate more like a fixed and center of galaxy spins more slowly than expected. Waterloo has been a hotbed of high tech…the Webcrawler internet search etc.
    - I rode my bike every morning through the Research In Motion complex to Clarica and Sun Life Insurance starting in 2001 when it was a couple of buildings and witnessed first-hand the insane growth of this company. As part of the PMI (Project Management Institute), Communitech meetings, and playing poker with about 30 other programmers in the region, I got lots of inside scoop on the latest in technology.
    - Eight players still all play poker monthly, and every penny and games won etc. is tracked back to the beginning with a monthly a text document of 5K, we are so efficient with data. Herman has the most monthly games at 245, and is ahead $291.90. Me, Dave Bright -$49.68 -$1.38 per game, 36 games, hosted 4 four times, hosting ratio 9.00. Biggest loser lifetime is Greg at $-129.61 – no concerns for unreported gambling gains for Canadian Revenue Agency). The poker tracking application was actually kept track of in the 90's on the Mutual Life Insurance Company's IBM mainframe, now in Excel!

2000 Relativity Paradox – Linear vs Rotational Motion

To Don Lincon FB messenger exchange: March 22, 2024: Nice! Hey Don an unrelated question from the amateur physics buff about one of my "Thought Experiments"... relativity states that there is no "standing still" in the universe, or locked down cartesian grid constituting an "ether". That speed and motion is all relative. For TRANSLATIONAL motion, my Newtonian limited brain can agree in part, but what about from the ROTATIONAL perspective. Two phonograph disks in space can be parallel and rotating with respect to each other, which one is not moving? I would answer, the one that shows zero on an accelerometer on its outer edge. But if you were to snap your fingers and all other surrounding mass in the universe were to disappear, would this still be true of the one disk? Is their mass and rotational inertia connected to the rest of the mass in the universe? And if this is true rotationally, why not translationally (so I don't rule out "standing still")

May 23, or is the rotational inertia of the rotating mass connected to some stationary ether independent of what other mass may be existing either near, far away, or taken collectively as all the mass in our currently observable universe.

2010 – Power of the Cube: Andromeda, Earth, My Mini-CNR Railway Empire

May 19th, 2024: adding this as a "thought experiment" but it is really fairly simple. Three examples to show large numbers by visually and graphically using cubes to compress a large number of things into a relatively small space. The first two are described in my Power of the Cube WordPress article and summarized below. I am adding a third one on stock ownership below.

- how far is it to the Andromeda Galaxy?
    - If you took a mustard seed 1 millimeter across for each kilometer, it would fill a cube 3 kilometers on each side!
- how old am I v.s. how old is the Earth? 4,500,000,000 years
    - cube root 4.5 billion is 1,638, so a cube 1.6 meters wide filled with cubic millimeters, something you can put in any room.
    - when I was 64, I was cube of 4x4x4 millimeters, you could put this on top and clearly see each and compare them.
- I made up the term "billometer" to be a cubic meter containing one billion cubic millimeters, something I started to build by making a cube and covering the six sides with home made graph paper on a one millimeter size, each side would be one million square millimeters
- What percent of a public company do I own. Described here…

Let's take the Canadian National Railway company as an example. Stock is CNR. Market Capitalization is 110 billion dollars and share price $173 and dividends of 1.95%. If I bought $11,000 in shares, or 64 shares, what percent of the company would I own? CHECK THESE NUMBERS!

- 110,000,000,000 vs 11,000 or 110,000,000 vs 11, or I would own one ten-millionth of the company.
- If you take the cube root of 110 billion you get 4,791.
- Visualize a full sized diesel locomotive 76 feet. So if you built a physical model of a diesel locomotive with a scale of 1:4791, it would be 0.0158 inches long, or very close to 1/64th of an inch! We can go with a 1:5000 scale for convenience.
- And Canada is 4700 miles wide, so you could build a scale model of North America 1 mile wide, and show every train track, box car, storage yard and all physical assets of CN Rail, THAT is the railway empire that I personally own.
- And the median length of a freight train is 5,300 feet, so in the 1:5000 scale, my trains would be just over a foot long like a piece of spaghetti only 5 times thinner.
- Oil tanker 58'6" 28,600 (US) gallons, minus three locos 5072 feet = 87 cars or 2,400,000 gallons, my train 0.000022 gallons
- But my $11,000 investment at 1.95% would pay me $214.00 per year! How can my tiny little spaghetti trains possibly generate that kind of income! This shows you just how big a large corporation is, how many train loads are done per year.
- By the way, Bill Gates and Warren Buffet are both big rail investors. I am pretty sure Bill went to his maximum 1/8 ownership of the company, or 12.5%. So his little trains aren't so little! By the power of the cube thinking, 1/8 would mean the dimensions would be only cut in half, and his locomotives 43 feet long! (Actually as of 2019 his ownership was 14.2%)

- My age in days, age 74 somewhere it will be 30x30x30, 31 at 81 32 at 89, 33 at 98

2024 Faster than the speed of light?

Written Thu May 23, 2024 A few thought experiments mixed in…
Thinking of this since 1970…

If you build one space ship it becomes impossible to reach light speed for each, because it's mass would grow to infinity. (relative to what? Some stationary ether?)

But if you build two space ships and accelerate them in opposite directions, you should be able to go to 51 percent of the speed of light in each, right?

- Now, in my Newtonian non-Einstein Relativity capable thinking brain, I have obviously missed some key concept of relativity and the impossibility of going faster than the speed of light, BUT I am thinking if our currently observable universe supposedly increasingly accelerating universe expansion is true, then each "local bubble" ….etc
- If each has a flashing tail light once per second at a given wavelength, and the observer at the original launch position between them is recording the time received and wavelength detected, the observer should be able to have evidence that each ship has reached 51% of the speed of light, at a time in the past which could be calculated by a Newtonian constant acceleration formula.
- An observer is also on each ship reading the same flashing numbered signal from both the launch position and the other ship.
- So when each observer on a ship hits the magic 50% of the speed of light, will the light from the other ship be redshifted to a frequency of zero? And will gravity cease to exist between the two ships? At 51%, do the ships no longer exist relative to each other? Could gravity be ceasing to exist between mass on either side of our observable universe and as we speak, there is a shell of matter disappearing away from US at the center, leaving us with an observable universe containing less mass. I am assuming that the gravitational effect of mass in bodies that is redshifted 90% is also reduced by 90%, or something like the square root of it
- What if each of the ship carried a few hundred pairs of entangled particles, and periodically one would be disturbed to trigger the matching one on the other ship…

Observable universe? The photons reaching us here and now do not represent the here and now of where they came from…
"Local Bubble". Just because we are getting photons that escaped some galaxy 13 billion years ago at the edge of our known observable universe, it does not mean that the effect of gravity on us from that distant galaxy still exists if that galaxy has escaped us (or does it? Does gravity travel at the speed of light?)

ADDED TO SORT OUT – PUT IN JUNK PILE DOC

https://www.cnbc.com/2024/02/06/harvard-trained-expert-if-you-had-to-prioritize-one-food-in-your-diet-it-should-be-this-one.html

I email myself ideas at 3 in the morning in order to go back to sleep….

Feb 12 2024

N29 motor mount
Fishing planar boards for downrigging while sailing
Logging non clear-cut big walkers
Robotics / remotely operated by video

- Rescue centipedes 3 to 5 tank treads expandable
- Tree climbing robots remote video operated to cut them down safely in small pieces, battery electric chain saw or wires that can be left in and recovered later, reloaded if stuck
- Robot painters with remote operators shoot line over house
- human controlled by video remote robots for various jobs, sorting recycling, killing weeds in fields or swamps

- Sign paint buildings or trucks re do alcohol base paint wash off
- High speed terrain tank like treads with adjustable extension feet vision guided for smoothing out the lumps
- High speed sail boats hydrofoils

Math simulations

- Calc volume a big enough encompassing cube with random generated xyz which are inside the 5 cube or 30 planes. Then solve volume the other way, with exact volume of sum of cubes, tetrahedrons,

Feb 22, 2024 Electrodynamic tether satellite. Musk constellation starlink layer close call orbit to reach all, half a degree off and slightly higher up, same idea for other space junk approaches, Also optimum orbit of a single service satellite that comes close to every other satellite in the musk internet constellation using finite fuel on board plus my spinning electodynamic tether invention

Project “My Eye” Brian Fox laughed at the idea around 2000 …I should have persued it! One master camera covering a large area to direct several other smaller cameras that can pan, quick focus on motion area, and zoom in, infrared options etc.

1968 2001 A Space Odyssey movie Chuck Gammage age 14? Grade 9? Meeting with 5 guys to make movies and animation

Mini inventions
N29 motor mount
Fishing planar boards for downrigging while sailing
Logging non clear-cut big walkers

Feb 5
Flat platform, four casters, front two turn, light weight frame made of strapping. Comes as a kit with or without local building materials. For basement storage

Voice to text button on a keyboard.
Custom keyboard app with multi functions, you decide which characters go where, any function call buttons, cycle through multiple layouts which can be saved as a collection set, can interface with existing apps, google voice to text pay per million characters