# Objective

Software developer doing applied research in business applications. IDE, system and user interface utilities are areas of interest. I’m always open to new challenges and solutions.

# Employment History

## 1 Feb 2023 – present. MacroDm Nanaimo, BC

## Mdm Projects and training.

**ClipMdPlus -** Ongoing development of an advanced clipboard use the RUST language. This is within a larger goal of setting style and development standards for converting object oriented languages.

**TaylorDo –** Cleanup remaining bugs on next update and release the Beta publicly.

**Kbil23 –** Collect initial scope and requirements prior to the ClipMdPlus and compare the 3 languages. Setup systems and development stack(s).

Educational courses and tutoring on business communications, online marketing and conflict resolution. Tutoring.

## 3 Jul 2020 – Jul 2022 MacroDM Nanaimo, BC

**Family Home School incl. childcare.**

(covid issues) 2 kids. Grade 3 and pre-school education and child care for working parents.. A remote school program. Cleaning. Continuing past medical research and financial management tools and training.

**MdmScahill1 project.**

Comparative detailed examination of exists tools using Rust, C++ and C. Finalising of component design and further R&D on remaining core area technologies.

## 1 Jun 2019 – 15 Jun 2020 MacroDM Calgary, Alberta

**MdmScahill Project – Cognitive Science Tools.**

**Phase 1 - Social media, requirements evaluation, domain knowledgebase, core component design, original design review.**

Studies: Mathematics (Calculus), philosophy, linguistics, neurology, NN, Rust programming, memory and database technology specific to use case. Core component design.

## 1 Jan 2018 – 1 Jan 2020

* Ongoing FOSS survey and technology evaluation.
* **Taylor Disk Optimizer:** Development and testing of optimized disk management application abstracted over crude script language and aging disk defragmenter. It is an advance in HDD software and an open source project to be released.
* **Mdm Support Tools:** An updated support library to install basic tool, repair and optimize Win PCs.

## 1 Jun 2017 – 31 Dec 2017

* Exploration - Social media, MSM and alternative comments and trends.
* A survey of online media and comments during ideology studies
* A more specific study using Twitter. Briefly, a combination of data science R&D and applying psychology to social media algorithms using a simple rule based “vector” biased by the human operator.

## 1 Jan 2016 – 1 Jun 2017 MacroDM Calgary, Alberta

* Phase 1 - Social media, requirements and domain knowledgebase.
* Studies: Current NN (AI) theory and code. Related math upgrading.
* Philosophy: Theory of knowledge, Kant, survey of main disciplines, phil. of science.

## 1 May 2016 – 1 Jun 2017 MacroDM Calgary, Alberta

Education and pet projects.

* **Windows Shortcut Repair Application**
* ASP Core training.
* Angular training.
* Hard disk theory and research on optimization.

## April 2012 – Dec 2015 MacroDM Calgary, Alberta

**SRT Project – Search, Replace, Transform.**

* Beta web site - complete IE 8 / 9 debugging of script framework. (Browser debugging.)
* Further HTML5 and PHP requirements. Address any other web site bugs prior to stable release.

## April 2012 – Jun 2013 MacroDM Calgary, Alberta

**Full time development and upgrading. Current scope and options. web focused:**

* Beta web site - complete IE 8 / 9 debugging of script framework. (Browser debugging.)
* Further HTML5 and PHP requirements. Address any other web site bugs prior to stable release.
* Still trying to select some (useful) module to implement as a Java web service.
* Plan to finish refactoring the C# data migration project now using the MVP rewrite.
* Pending start of Pick Project (port bootstrap and conversion core libraries).

## Oct 2011 – Mar 2012 Calgary, Alberta

**Development and upgrading** (and time off)**:**

* Web developer (browser and script) technical issues, template issues, HTML5.
* Social media overview and evaluation.
* Windows (C#) Clipboard App.

## Aug 2009 – Sept 2011 MacroDM Calgary, Alberta

**Full time development and upgrading.**

**C#, JavaScript, animation, templates, HTML4, MSSQL, multivalued**

* C# data migration project mile stone (MV schema conversion to MsSQL.)
* Completion of first release C# MVP framework, MsSQL database layer, UI enhancements.
* C# MVP framework rewrite for Converted Code. Initial Debugging, code review, WPF UI requirements and strategies.
* Beta release of MacroDM web site
  + JavaScript framework, templates, and animated menu thumbnails.
  + JavaScript free version.
  + Alpha release – JavaScript framework and template prototypes.
  + Animation Project – cascading menus (thumbnail page image) with enlargements and random effects.
* Pick Project preparation, K-BIL/SMS environment port & web enabling.

## April 2009 – Dec 2009 MacroDM Subcontract Calgary, Alberta

Retail and Web based marketing of used merchandise.

**IT Business:**

* Development Pawn Shop Management application. MS Access 2003, VBA.
* Enhance and debug a client’s rudimentary existing application.
* Focus on compliance, reporting and user interface.
* Complete scope of post-relational project repositioning service billing application as a data centre application using IBM Universe technologies (post-relational) including migration and detailed design.
* Commence second phase of C# data migration / mediation project started in '08.

## May 2008 – Mar 2009 MacroDM Developer / Student Calgary, Alberta

Part time office services clients. Full time Agile project on Dot Net platform (Browser based application and partial framework.) Project processes ***post-relational database schema, data and standard export format files into MySQL and SQL Server databases.***

Other business and upgrading:

* ISO 9000-9004, total quality management. Review of coding standards and methodology.
* Update / review of Ms Server, CM, Office and Open Office products. Enterprise document management.
* C# & .Net. MySQL. MS SQL Sever. Server high availability. Native XML. RIA.
* Detailed research on Oil & Gas Industry per document management and GIS technology.

## 1999 - May 2008 MacroDM (dba), Developer / Consultant Gibsons, BC

### 1998 - 2008 Axion, MacroDM and upgrade projects, Sr. Developer Gibsons, BC

Design of solutions for web based billing application. Scope, requirement and preliminary design for web based intelligent search application.

### 1992 - 2009 MdvWood, Michael Vaughan, Small Business Consultant Gibsons, BC

### 2005 Membership Maintenance Application, Developer Gibsons, BC

### 2002 - 2004 MacroDM Web and Document Standards, Developer Gibsons, BC

### 2002 Outlook Replication Classes, Developer Gibsons, BC

## 1999 - May 2008 MacroDM (dba) Gibsons, BC

### Electrical, renovations and landscaping

Over nine years experience in trades work initially in gardening and landscaping, progressively put more focus on renovations and spent seven years working full / part time in electrical.

## 1996 – 1999 Memex Systems Ltd Gibsons, BC

### Consultant / Software Developer - Technology agreement

## 1986 – 1996 MacroScope Design Matrix Vancouver, BC

### Contract Software Developer

## 1978 –1996 Axion Computer Systems Ltd. Vancouver, BC

### Consultant / Software Developer / Software Manager / Customer Service

# Skills, Expertise and Industries

## Skills / Expertise

* **Applications development:** using Rust, C#,.Net, Angular, ASP.
* Excellent knowledge of OOD/OOP, MS Office, Open Office, numerous web and multimedia products.
* **Database design**: MY SQL, MS SQL, MsAccess, Universe, Unidata, Pick, Open Systems, Oracle compliance. Multi-dimensional / post-relational databases and other OLAP / BI.
* **OS**: Windows XP, Vista, Linux.
* **Languages**: C#, Java, JavaScript, C, C++, HTML/CSS, VBA, multivalued Basic, other.
* Standards and best practices for desktop and Web environments.
* Extensive user interface design and development.

## Services

* Experience providing Scope, summary and detailed requirements, and other specifications
* Standards development, Technology evaluations, other technical writing.
* Management of development projects and small production teams.
* Quality Assurance, testing, troubleshooting, installations, training and technical help desk.
* eCommerce, PAC, EDI for bank and credit card POS.
* OS support, system, application and device integration interfaces, communications protocols.
* Development tools for conversion, migration, deployment, dictionaries, search, automation and IDEs.
* Prototypes for websites, infrastructure, hand coded OO classes, accessibility and user interfaces..
* Senior developer with experience in all aspects of the SDLC.
* Good communications skills. Management reporting and consulting.

## Applications / Industries Served

* CATV / broadcasting, Customer care. Marketing support and reporting.
* Accounting, management reporting. Historical reporting, analysis and statistics.
* Purchasing, manufacturing, foods processing, POS, wholesale distribution.
* Property development, accounting & management. Other service billing including legal.
* Work in other industries including construction (new / renovations), landscaping and electrical.

# Major Accomplishments

Major contributor or author of the following software applications:

* MacroDM Web and Document Standards ('02, '04)
* Mdm post-relational to SQL import utility ('08-'09)
* Minor VBA and database driven applications. ('02 - '05)
* K-Bil billing and customer care. ('86 - '02)
* SMS broadcast customer care. ('96 - '99)
* Addressable communications. ('93 - '96)
* PickTr ('87 - '91)
* Mdm OSS. ('84 - '92)
* Accessibility technology. ('91)
* SRT search, conversion, change management system. ('88 - '91)
* Extensive research on real-time context sensitive UI's. ('84 - 85)
* OO in structured languages, load balancing, IDE tools. ('87 - '95)
* Extensive research on expert systems & cognitive science. ('84 - current)

Co-author or contributor to:

* PKHarmony. ('86 - '92) Property development, accounting and management. ('82 - '85)
* Began in accounting, wholesale, distribution & sales order entry. ('78 - '88)