**Tommy Mao Vancouver, BC (Willing to Relocate) | 587-966-2125 |** [**tommymao.ya@outlook.com**](mailto:tommymao.ya@outlook.com)

**GitHub:** [**https://github.com/yiangMao**](https://github.com/yiangMao) **| Portfolio:** [**https://yiangmao.github.io/YiangMaoPortfolio.github.io/**](https://yiangmao.github.io/YiangMaoPortfolio.github.io/)

**Summary of Qualifications**

* Competent Computational Intelligence and Design graduate with solid programming knowledge and proven Co-op experiences in delivering robust and scalable **software development**. Demonstrated a solid understanding of the **Object-Oriented Programming (OOP), SDLC, database administration,** and **system design**.
* Proven exposure to cloud-based ERP solutions, TIBCO Jaspersoft/Oracle/SQL Server database administration and solutions integration, rolling out ERP modules including Accounting, Inventory, Utilities & Energy, etc.
* Experience with database design, writing queries, creating tables & views, stored procedures, reports, etc.
* Proactive communicator and team player with an agile development mindset.

**Technical Proficiency**

* **Programming & Dev Tools:** C++, Java, Python, PHP, Haskell, Prolog; Jaspersoft Report Studio, MySQL, MS SQL Server, Oracle Database; IDE (Eclipse, IntelliJ, PyCharm, CLion), Visual Studio Code, Arduino, Xshell

**Education**

## B.Sc | cOGNITIVE SYSTEMS – COMPUTATIONAL INTELLIGENCE & DESIGN | UBC | 2021.11

* Algorithms & Data Structures, Relational Databases, Functional and Logic Programming, Software Construction

**Work & Freelancing Project Experiences**

**Computer Science Tutor – Part-time | SaavyPro Edu Inc. | 2022.10 – Present**

* Provide specialized 1:1 tutoring services for object orient programming, data structures, compiler errors and debugging techniques, using Java programming language.

**Software Programmer - Freelancing | People Table Tennis Club | 2022.3 – Present**

* Worked with 2 Mechanical Engineers to prototype a Table Tennis Auto-pitching Robot, programmed an Arduino-based control system to pitch Ping-Pong balls with various settings of speed, frequency, and position.
* Developed and executed test procedures to verify customer requirements; performed cost/performance tradeoff analysis of different programming options and investigated the usage of the latest components and technologies.
* Interfaced with client to align on technical functionalities, timeline, budget, and compliance requirements.

**Database Administrator / Programmer – Co-op | JOMAR Softcorp International | 2019.9 – 2020.3**

* Participated in cloud-based ERP solutions integration projects for 2 clients in the insurance and utilities industry.
* Developed new features for Java-based applications; understood client companies’ data architecture, developed mission critical data imports & exports with diverse data sources (web services, FTP sites, JDBC based data sources).
* Developed and executed SQL queries to automate data acquisition from Oracle Database and optimized report production in TIBCO Jaspersoft Studio, improving report efficiency by 18%.
* Tested and prepared implementation of database software upgrades and patch releases for customers; maintained documentation of new and amended procedures.

**Project Experiences**

**Photo Editor Web App | Python (OpenCV, Rembg, WordPress)**

* Working with a Baby Portrait Photography Studio in China to design a program to cut out the portrait part from given pictures and combine with new backgrounds to create new pictures using OpenCV and Rembg library.
* Designing a website with WordPress for the background changer which categorizes and presents background images and enables users to upload and edit their own images online.

**Search Autocompletion | Java, Haskell**

* Designed a program for search autocompletion in both Haskell and Java.
* Implemented autocomplete functionality by using binary search to find all query strings that start with a given prefix; and sort the matching terms in descending order by weight.