

GitHub: <https://github.com/yiangMao> | Portfolio: <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.