

TECHNICAL PROFICIENCY

- ❖ **Programming language and library:** C/C++, Java, R, Python, Bash Script
- ❖ **Web development:** HTML, CSS, JavaScript, React.js, D3.js, Bootstrap, jQuery, JSON, AJAX
- ❖ **Server side and database:** MySQL, MSSQL, NodeJS, Express.JS, REST API
- ❖ **Familiar APIs:** Wikipedia, Microsoft Azura, Twitter, Facebook
- ❖ Solid knowledge in Algorithm, Data Structure, test methodologies and design pattern
- ❖ High proficiency in using Photoshop, PowerBI, Markdown, Git, Terminal, Linux, MacOS and Windows

PROFESSIONAL SKILLS

- ❖ Exceptional critical thinking and problem solving skills acquired in challenging courses
- ❖ Strong communication skills and teamwork skills developed through working experience
- ❖ Comfortable with agile development; able to withstand pressure in a fast-moving team
- ❖ Well organized with an analytical mind; Self-motivated and detail-oriented

PROFESSIONAL EXPERIENCE

Software Engineer

May — Aug, 2017

TRU Simulation + Training — Montreal, Canada

- ▶ **Search Engine Project**
 - Developed a stable server that provides accurate searching results using **NodeJS**
 - Designed a multi-functional website that cooperates with the server in **JavaScript** and **AJAX**
 - Designed and maintain **Rest APIs** to support build-in searching function
 - Created and optimized database by writing quality **T-SQL** codes, queries and views
 - Implemented **Microsoft Azura API** to enhance conceived Text Analytics **algorithm** solution
 - Generated data relationship chart by implementing **HTML5 SVG**
 - Integrated with **Microsoft PowerBI** to enhance data visualization and interaction
 - Delivered a formal presentation and project demo to company leaders
- ▶ **Customer Management System**
 - Optimized **JavaScript** code written by other colleagues and integrated to the **NodeJS** server
 - Designed a practical web application to support customer management using **React.js** and **CSS3**
 - Optimized **SQL** queries by indexing to ensure database has optimal performance
- ▶ **Test Station Automation Tool**
 - Developed an automatic generator that assists testers in **JavaScript**
 - Combined with company's MediaWiki page by applying **API** and **AJAX**

PERSONAL PROJECTS

High-Level Programming Experience

- ▶ **LandYourShip game design in Java** Oct 2017
 - Implemented a friendly user interface using **MVC** architectural pattern
 - Improved user experience by implementing undo and keyboard control in **Java**
 - Added two-person competition function to enhance gameplay experience
- ▶ **ChamberCrawler3000 group project in C++** Oct 2016
 - Structured the main architecture with the best **design pattern**
 - Conceived an **algorithm** solution which decreases the run-time
 - **Debugged** using Valgrind and GDB to ensure no memory leaks
 - Developed new features that improve gameplay experience
 - Implemented **test methodologies** and processed complete software evaluation

Web Development Projects

- ▶ **Tic Tac Toe Game, Simon Game** Apr 2016
 - Increased the performance of AI by applying advanced **algorithm**
 - Improved interactive graphic user interface using **Bootstrap**
 - Made game user-friendlier by improving UI and providing prompt feedbacks
- ▶ **Wikipedia viewer, Personal dashboard** July 2016
 - Created practical online tools that increase working efficiency in **JavaScript** and **jQuery**
 - Enhanced searching and sharing efficiency by applying **Wikipedia API** and **Twitter API**
 - Provided up-to-date information for users by integrating **Weather API**

EDUCATION & CERTIFICATION

- ❖ Honours Computer Science, University of Waterloo, Waterloo, ON Sep 2015 — May 2019
- ❖ FreeCodeCamp Front End Development Certification Jan 2017