

Education

The University of British Columbia Master of Engineering in Electrical and Computer	Vancouver, Canada Expected May, 2025
University of Alberta First-Class Honors Bachelor of Science in Computing Science, GPA 3.80/4.00 <ul style="list-style-type: none">Teaching Assistant for CMPUT 301 Intro. to Software Engineering (Winter 2023)Undergraduate Scholarship (2019, 2020); First Class Standing (Winter 2019, Winter 2020, Winter 2021)	Edmonton, Canada 2018/09 – 2023/06

Professional Experience

Hyperledger, The Linux Foundation Project Maintainer Software Development Intern <ul style="list-style-type: none">Developed and maintained web application in collaboration with Hyperledger Cello team to manage Hyperledger Fabric networks.Built backend APIs for node and channel’s lifecycle operations in blockchains using Django.Utilized React.js, Ant Design and UmiJS to develop the user interface, and refined the user manual.	Remote 2023/08 – Current 2022/06 – 2022/11
Department of Mathematical Sciences, University of Alberta Undergraduate Research Assistant <ul style="list-style-type: none">Designed, built and implemented a visualization tool to solve illumination problems using Java.Depicted and constructed scientific trigonometric graphing calculator to support unlimited decimal precision at processing speeds 20 times faster than currently available calculator tools.	Edmonton, Canada 2022/05 – 2022/08
Willowglen Systems Software Developer (Co-op) <ul style="list-style-type: none">Diligently maintained SCADA system known as SCADACOM used for managing subway operations.Enhanced the commit process and streamlined the speed of NoSQL databases by 10 times.Configured and continuously improved high concurrency and distributed services to enable increased data processing through data management techniques.	Edmonton, Canada 2021/09 – 2022/04
The Software Maintenance & Reuse Lab, University of Alberta Undergraduate Research Assistant <ul style="list-style-type: none">Conducted in-depth research on test migration under the supervision of Dr. Sarah Nadi and Dr. Ajay Kumar Jha.Implemented automatic test coverage measurement in a test migration tool, and facilitated migration benchmarking.Collected datasets of various Java projects and subsequently experimented with test migration, ensuring tool’s universal compatibility.	Edmonton, Canada 2021/05 – 2021/09
Intricate Group Junior Software Developer (Co-op) <ul style="list-style-type: none">Built oil and gas report forms for the website’s user interface using JSP, jQuery and JavaScript.Utilized Spring to implement web service and PostgreSQL to manage data while applying MVC architecture.	Edmonton, Canada 2021/01 – 2021/04
AdoptOpenJDK, CANOSP AdoptOpenJDK Developer (Open Source) <ul style="list-style-type: none">Supported change-based auto-test workflow and implemented GitHub CI for specific tests triggered by commits.Investigated and recovered usage of test coverage tool JCoV for AdoptOpenJDK project to achieve high test coverage.	Edmonton, Canada 2021/01 – 2021/04

Project Experience

Stochastic Bayesian Refinement Network [Python, PyTorch, Object Segmentation & Deep Learning] <ul style="list-style-type: none">Co-authored a research paper focused on moving object detection in videos using deep learning techniques. Implemented a novel Bayesian refinement network, improving the precision of object detection. Devised and executed an ablation study to evaluate the contributions of model components, affirming the robustness of the proposed approach. Paper is currently on arXiv:2304.09949.	2022/12 – 2023/04
Feature-Guided CNN 2.0 [Python, PyTorch, XAI & Deep Learning] <ul style="list-style-type: none">Implemented a new method to improve Feature-Guided CNN for MRI denoising and registration using Explainable AI loss.	2022/09 – 2022/12
i-Connect [Python, Django, JavaScript, React & Git] <ul style="list-style-type: none">Developed social media application to allow users to create and engage with posts through likes, follows and shares; connected service and data to 3 external groups and applied agile practices to fulfill the development process.	2021/09 – 2021/12

Skills

- Programming Languages** | Java, C, C++, Python, JavaScript, TypeScript HTML, CSS, JSP, Lisp & Golang
- Frameworks** | React.js, Express.js, NestJS, Django, Node.js, UmiJS & Gin
- Tools & Libraries** | Git, Bash, LaTeX, OpenCV, NumPy, PyTorch, Docker, jQuery, MongoDB, Firebase, SQLite & PostgreSQL