YUN JIA HAO

Yunjia.hao@mail.utoronto.ca | LinkedIn | GitHub | Website | +1-613-276-1766 | 501 Yonge St, Toronto, ON

EDUCATION

University of Toronto Sep 2020 - May 2025 (With PEY Co-op)

Bachelor of Applied Sciences, 4th year Computer Engineering, Cumulative GPA: 3.95, Dean's Honor List

Relevant Courses: Data Structures and Algorithms (A+), Introduction to Databases (A-), Operating Systems (A)

TECHINICAL SKILLS

Languages & Frameworks: C++, C, JavaScript (Node.js, React.js), Java, Python, SQL, HTML, CSS, Perl

Tools: Git, GitHub Actions, Postman, JIRA, Confluence, SQL Server, RESTful APIs, PyTest, Agile

WORK EXPERIENCES

Manulife Toronto, ON

Full-Stack Engineer Intern May 2024 – August 2024

- Developed the Unlock Tab for the Passcode full-stack application built in **JavaScript** using **React.js** and **Node.js**, reducing customer account unlock time by over **75%.**
- Migrated Passcode application from Apigee to Azure APIM with **Node.js**, enabling seamless Azure integration.
- Conducted code scans and resolved **40+** security vulnerabilities and penetration test issues across **4** internal applications, improving security and enabling **2** successful releases**.**

Intel Toronto, ON

Software Engineer Intern May 2023 – April 2024

- Engineered and optimized **15+** tools in **Python** and **C++** used for preprocessing and analyzing data passed into Intel's **FPGA** models, improving processing speed by over **50%** using **multiprocessing** techniques.
- Developed workflows in **HTML** and **Perl** for generating data analysis reports, accelerating data debugging and analysis by **35%**.
- Created and executed **regression** and **unit tests** to ensure reliability of data passed into **FPGA** timing models.
- Leveraged visualization tools to analyze and detect anomalies, ensuring data quality and enhancing model accuracy.

PTC Montreal, QC

Software Engineer Intern June 2022 – August 2022

- Developed full-stack features using **JavaScript** in ThingWorx, an **IIoT** platform, to visualize customizations and deprecations on building blocks, enhancing software update processes for over 100 internal developers.
- Designed a testing framework that shifted unit testing from JUnit to ThingWorx, reducing testing time by **30%.**

University of Toronto Toronto, ON

Machine Learning Research Intern May 2021 – August 2021

- Collaborated in designing Axiothea, a three-layer cross-silo federated learning framework, by developing **Python** methods to enforce differential privacy and perform quantization.

PROJECTS

Geographic Information System with C++ 2022

- Developed a GIS program using the ArcGIS API and **C++,** facilitating area visualization and route planning.
- Implemented a suite of graph algorithms and heuristics to optimize the solution to the Travelling Courier problem.

ARducate - AR Learning Module Creator 2024

- Developing a web application using **React.js** enabling educators to build AR programming courses.
- Implemented 3D asset manipulation and interactive controls using **Three.js** and state management with **Jotai**, allowing users to customize AR learning lessons dynamically.

VOLUNTEER EXPERIENCES

Webmaster, Ontario Engineering Competition 2022 June 2021- January 2022

- Led development of an engaging competition website using **HTML**, and **CSS**, driving **3000**+ site visits with its captivating and user-friendly design.