Irene Li

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EDUCATION

Bachelor of Applied Science and Engineering, University of Toronto   Will Graduate in Jun, 2025

Major in Computer Engineering
Minors in both Engineering Business and Artificial Intelligence (AI)

SKILLS

Programming languages: Software: C++, C, Python, Bash/Shell Script, Perl   **Hardware**: Verilog, ARM Assembly

Operating System: Linux Ubuntu, Windows   **Tools & Technologies**: Git, GDB Debugger, JIRA

Languages: English and Mandarin

PROFESSIONAL EXPERIENCE

SOC Diagnostics Intern, AMD   May 2023 – Aug 2024
- Applied hardware architectural knowledge and **C++ programming** skills in planning, implementing, and maintaining **Diagnostics tests** on **AMD Datacenter MI family products** (MI300A, MI300X, etc)
  - Learned and applied **Datacenter SOC Architectural knowledge**, specifically related to **PCIe, memory subsystems**, and etc.
- **Triaged and debugged** Diagnostics test issues brought by changing hardware and firmware using **GDB debugger** in **Linux Ubuntu environment**
- **Took initiative** to automate testing process and created system checking scripts in **Python and Shell**
- Created training plans and schedules for new interns

Website Operation Intern, Shanghai Linker Group Co. Ltd   Jul 2021 – Aug 2021
- **Tested** functionalities of the company's online platforms
- **Recorded and reported** issues and drawbacks
- Designed and created front-end assets to the website in **Figma**

PROJECTS

Ergonomic Keyboard   Mar 2024 – May 2024
- **Designed PCB layout** of a personal ergonomic keyboard in KiCad
- Built and implemented firmware for **AVR microcontroller** in **C**

Spoken Digit AI Project, University of Toronto   May 2022 – Aug 2022
- Designed, implemented, and trained a **Convolutional Neural Network (CNN)** model in **Python**
- Conducted sound and image processing in Python
- Experienced with Machine Learning framework and libraries such as **PyTorch** and **Scikit-learn**

C++ Geographic Information System (GIS), University of Toronto   Jan 2022 – Apr 2022
- Designed and developed the **front-end interface** and **back-end algorithms** of the GIS in **C++** that runs in the **Linux Ubuntu environment**
- Organized and managed project progress and tasks among team members

EXTRACURRICULAR

Marketing Co-Director, IEEE Student Branch, University of Toronto   Apr 2021 – Apr 2022
- Devised marketing schedules and plans for events
- Created training plans for Marketing Associates and assigned roles and responsibilities

Member, Cloud Club, University of Toronto   Sep 2020 – Apr 2021
- Created **front-end assets** for a **web game**
- Implemented **back-end logic in Python**

AWARDS

- Dean's Merit Award, University of Toronto
- Edward S Rogers Sr. Admission Scholarship, University of Toronto
- TD Bank Higher Education Award, University of Toronto

RELEVANT COURSES

- Hardware: Computer Organization, Digital Electronics, Digital Systems, Circuit Analysis
- Software: Algorithms & Data Structures, Operating Systems, Computer Networks, Software Communication & Design
- AI: Neural Networks and Deep Learning, Intro to Machine Learning

REFERENCES

[Available upon request]