

# Zhengenan (Timmy) Zhu

☎ +1-519-731-3100 | @ timmy.zhu@mail.utoronto.ca | 🔗 LinkedIn | 🐙 GitHub | 👤 My Portfolio Website

## EDUCATION

---

### University of Toronto

*Master of Engineer in Electrical and Computer Engineering; GPA: 4.0/4.0*

Toronto, ON

*Sep 2023 - Aug 2024*

### University of Waterloo

*Bachelor of Computer Science and Financial Management (Honours Co-op); GPA: 3.7/4.0*

Waterloo, ON

*Sep 2018 - Apr 2023*

## EXPERIENCE

---

### Xiaomi Technology

*Software Developer*

Beijing, China

*Jan 2022 - Aug 2022*

- **Backend Development:** Developed a software application for Xiaomi monitors, akin to Samsung's MagicTune, using **C++**. Enabled users to adjust monitor display settings directly from their computers.
- **Frontend Development:** Utilized **Node.js** and the **Electron framework** to design a user-friendly interface that ensures seamless communication with monitor hardware.
- **Embedded Systems Development:** Enhanced the software's interaction with monitor hardware by programming firmware to send customized DDC/CI commands using **Embedded C**.

### Electro Source

*Software Developer*

Toronto, ON

*Sep 2020 - Dec 2020*

- **Workflow Automation:** Automated the tax incentive workflow process using **Python**, which included updating user work records in the **Polarion** and **Jira** systems.
- **Slack Bot Architecture:** Integrated the workflow with a **Slack chatbot**, enabling users to update their work records through direct interaction with the bot.
- **Email Processing:** Developed an automated email processor for record updates via form submissions.

### ATS Automation Tooling Systems

*Software Developer*

Cambridge, ON

*Jan 2020 - Apr 2020*

- **Project Tracking Features:** Developed **Microsoft Excel VBA** tools to assist team leaders in managing project statuses, enabling real-time updates of work records to a centralized database for managerial monitoring.
- **Data Processing:** Created an M query file for **Power Query** to enhance data extraction and analysis processes.

### DigitalEd

*Quality Assurance Analyst*

Waterloo, ON

*May 2019 - Aug 2019*

- **Test Case Development:** Participated in a **CI/CD** environment by developing and executing unit tests to ensure application usability, reporting detected bugs via **Jira** to the development team for resolution and deployment.
- **Bash Scripting:** Implemented functions using **Bash scripts** to validate user inputs, employing **Test-Driven Development (TDD)** practices.

## PROJECTS

---

### Amazon-Style Shopping Website | [GitHub](#)

- **JavaScript and React Website Development:** Utilized the React framework along with **JavaScript** and **CSS** to create a website similar to Amazon.

### Mobile Gesture Recognition App | [GitHub](#)

- **Kotlin App Development:** Developed a mobile application using **Kotlin** that recognizes gestures. The app identifies and displays the top three matching gestures from the gesture library..

### Face Recognition and Age Estimation | [GitHub](#)

- **Neural Network Architecture:** Developed and compared CNN, ResNet, DenseNet, Xception and Squeezenet models for face recognition and age estimation in **Python**, incorporating data cleaning and augmentation.

## SKILLS

---

**Programming Languages:** C/C++, Python, Java, Bash, R Studio, VBA, DrRacket, Kotlin, JavaScript, HTML/CSS

**Technologies:** React, Electron, Node.js, MySQL, Git, Docker, AWS, Kubernetes, GCP, PyTorch, TensorFlow, Bitbucket, Jira, LaTeX, Polarion, PowerBI