

Zhengenan (Timmy) Zhu

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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