Zhengnan (Timmy) Zhu

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EDUCATION

University of Toronto   Toronto, ON
*Master of Engineer in Electrical and Computer Engineering; **GPA: 4.0/4.0***   *Sep 2023 - Aug 2024*
University of Waterloo   Waterloo, ON
*Bachelor of Computer Science and Financial Management (Honours Co-op); **GPA: 3.7/4.0***   *Sep 2018 - Apr 2023*

EXPERIENCE

Xiaomi Technology   Beijing, China
Software Developer   *Jan 2022 - Aug 2022*
- **Backend Development:** Developed a **C++** application for Xiaomi monitors, similar to Samsung's MagicTune, enabling direct monitor adjustments from computers, with **10,000+** users.
- **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:** Developed custom DDC/CI commands in **Embedded C** to optimize the firmware code within Xiaomi monitor chips, enabling advanced feature adjustments.

Electro Source   Toronto, ON
Software Developer   *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 Corporation   Cambridge, ON
Software Developer   *Jan 2020 - Apr 2020*
- **Project Tracking Features:** Developed **Microsoft Excel VBA** tools to assist **100+** 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   Waterloo, ON
Quality Assurance Analyst   *May 2019 - Aug 2019*
- **Quality Assurance and Testing:** Executed **500+** UAT cases and performed exploratory testing in a **CI/CD** environment, reporting bugs via **Jira** to maintain the functionality of Möbius.
- **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, Google Cloud Platform, PyTorch, TensorFlow, Keras, Bitbucket, Jira, LaTeX, Polarion, PowerBI