Andrew Zaki

http://www.andrewzaki.works

Email : zakiandrew4@gmail.com
Mobile : +1-647-992-0346
Github : aezaki
LinkedIn : andrew-zaki

EXPERIENCE

Magna — Aurora, ON
Software Developer — May 2023 - Present

- Led the development of **HMI** and **automation** software for a fleet of **5+** robotic systems, reducing system downtime by ∼**10%** and cutting cycle times by up to **5 seconds** per operation.
- Developed **C++** and **Python** based software's to interact with **APIs** and robotic systems, optimizing communication protocols and reducing data transfer latency.
- Oversaw solo and group projects using **Azure**, ensuring ∼**95%** on-time delivery and successful sprint completion by implementing task tracking and agile best practices.
- Architected and managed **SQL** databases and implemented algorithms that improved query efficiency by ∼**12%**, reducing overall processing time for robotic system operations.

FCT — Oakville, ON
Software Engineer Intern — May 2022 - Dec 2022

- Leveraged **Microsoft Azure DevOps** to manage cross-functional team projects and track individual tasks, resulting in a ∼**15%** increase in task completion efficiency.
- Developed and executed static and dynamic testing systems using **JavaScript**, improving code reliability and reducing bug occurrence rates
- Developed a **C++** web application for secure data exchange between **TD** and **RBC** servers. Ensured thorough testing and system stability to avoid disruptions, reducing risk of server crashes.

Canadian Coptic Center — Mississauga, ON
Data Scientist — Sep 2020 - Apr 2022

- Built and maintained a **MySQL** database for **500+** consumers, improving data organization and retrieval speed, which streamlined reporting and reduced manual data processing
- Developed and optimized **SQL** queries and scripts to facilitate real-time reporting and automate maintenance processes, reducing data processing time
- Evaluated database requirements and formulated long-term data strategies, resulting in improved data accuracy and consistency. Presented insights to leadership via **Power BI**, aiding key decisions.

EDUCATION

University of Waterloo — Waterloo, ON
Bachelor of Computer Science — Sep. 2018 – Aug. 2024

Relevant Courses
Data Structures, Algorithms, OOP, User Interfaces, Database Management, Machine Learning

PROJECTS

- **Coptic History Mobile Application** A solo project built using **Swift** and **Xcode** as an attempt to educate on the history of the Coptic Orthodox Christianity Religion
- **Notes Desktop Application** A group project built using **Kotlin**, **Gradle** and **JavaFX**, with an **SQLite** database, to create a note taking application that brought advanced features, while keeping a clean UI

PROGRAMMING SKILLS

- **Languages**: C++, Python, Javascript, Swift, SQL **Technologies**: Django, React, MySQL, Power BI