Anson Lau

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EDUCATION

University of Waterloo   Waterloo, ON
B.A.Sc. in Computer Engineering, Option in Artificial Intelligence   *Sept 2020 - April 2025*
- **Relevant Courses**: Data Structures and Algorithms, Operating Systems, Database Systems, Computer Networks, Compilers, Machine Learning, Reinforcement Learning, Autonomous Vehicles

TECHNICAL SKILLS

Languages: Java, C#, C++, JavaScript/TypeScript, Python, HTML/CSS, SQL
Frameworks: React, .NET, xUnit, MySQL, Appium, Segment, Mixpanel, Next, Flask, Firebase, Springboot
Tools: Git, GCP (Big Query, Cloud Armor), Azure DevOps, Superset, Jira, Qase, Jenkins, Docker, Terraform

PROFESSIONAL EXPERIENCE

Software Developer Intern   Waterloo, ON
Magnet Forensics   *Sep 2024 - Dec 2024*
- Maintained platform compatibility using **C#** and **.NET** by updating data extraction logic to recover digital forensics evidence across 5+ industry-leading platforms, such as Safari and Telegram.
- Optimized data processing workflows using efficient retrieval techniques for parsed/carved data from **SQLite databases**, resolving performance bottlenecks.
- Developed unit/integration tests using **xUnit**, and utilized CI/CD pipelines in **Jenkins** to automate builds and NuGet deployments.

Software Developer Intern   Waterloo, ON
Geotab   *Jan 2024 - Apr 2024*
- Implemented error-handling policies using **C#**, **.NET**, and **Polly**, updating error code mapping for the **Swagger API** endpoint, resulting in a 20% error rate reduction.
- Developed a real-time API usage monitoring dashboard utilizing **Superset** and **SQL**, facilitating the tracking of 10,000+ daily API calls.
- Spearheaded cloud API rate-limiting policies using **GCP** and **Terraform**, reducing excessive traffic by 35%.
- Created and validated unit/integration tests using **Moq** and **xUnit**, ensuring the stability and scalability of newly implemented features.

Software Developer Intern   Markham, ON
Brickeye   *Jan 2023 - Apr 2023*
- Engineered end-to-end automation testing for new Android mobile application features using **Python**, **Android Studio**, **Browserstack**, **Appium**, and **Docker**.
- Utilized **TypeScript**, **React**, and **Segment** to track 5,000+ monthly user events on the mobile/web application to gather user behavior analytics data on **Mixpanel**.
- Managed daily tasks using **Jira** and submitted pull requests via **AWS CodeCommit**.

Electrical Engineer Intern   Markham, ON
Algal Engineering   *May 2022 - Aug 2022*
- Developed the company's web application utilizing **JavaScript**, **HTML**, and **CSS**.
- Designed electrical wiring diagrams for nuclear projects, power systems, and building services using **AutoCAD**.
- Conducted short circuit analysis and electrical load calculations using **ETAP** software for 10+ projects.

PROJECTS

MTG Commander Classifier   github/A74lau/MTG-CC
Python, Tensorflow, Sklearn, Numpy, Pandas, Sryfall API, Jupyter
- Developed a supervised learning model that predicts optimal Magic: The Gathering deck themes for new commanders by analyzing card features and theme frequencies.

PokeSet Tracker   github/A74lau/Poke-Tracker
Java, ThymeLeaf, HTML/CSS, Springboot, Maven, TCGdex API
- Developed a web application that pulls real-time Pokemon TCG card data from the TCGdex API, featuring set filtering, card search, and responsive UI for collectors.