YAOWEN MEI

Guelph, ON N1G 0C7

Work Experience

Google April 2022 – July 2022

Software Engineer Summer Internship

Waterloo, ON

- Developing the Serialization feature for Firebase Firestore Android SDK with Kotlin Serialization library.
- Optimized Gradle build files and reduced the unit tests' run time by 50% on cloudtop.
- Updated build logic to support SDK build on Windows
- API proposal reviewed by Android API Council

Amazon Web Services

Jan 2022 – April 2022

Software Development Engineer Winter Internship

Vancouver, BC

- Developed an end to end service to monitor CI/CD pipelines' failure messages for AWS Simple Workflow (SWF) team.
- Packaged infrastructure resources with the AWS Cloud Development Kit (Infrastructure as Code).
- Processed raw data with Lambda functions, delivered messages to Slack Webhooks, archived records to S3 bucket.
- Reduced the monthly pipeline blockages by 25%.

Stackpole International Powder Metal Ltd.

April 2019 – May 2021

Process Quality Specialist

Ancaster, ON

- Wrote Coordinate Measurement Machine (CMM) programs to match the customer's specification.
- Wrote Windows Batch scripts to monitor inspection status and archive inspection results.

School Projects

UWaterloo Campus Tour App (Link) | Java, Android Studio, Google Firebase

August 2021

- Developed an android map application with the Google Map API and Firebase database for students to share their unique stories related to different buildings on campus.
- Implemented with various software architectural styles, such as repository, pip & filter and implicit invocation style to enhance the scalability and re-usability of the code.
- Applied decorator and strategy design patterns to decrease coupling and increase cohesion between objects.
- Awarded the "best final demo" prize of the Summer 2021 CS646 class at UWaterloo

Mobile Machine Learning App (Link) | Java, Android Studio, Tensorflow Lite

August 2021

- Created a mobile phone app can identify different analytical chemistry equipment with the back camera.
- Trained a Tensorflow Lite machine learning model with 100 pictures for object identification.
- Elected as the best mobile app of the Summer 2021 ENGG6400 class at U of Guelph

Technical Skills

Languages: Python, Java, Kotlin, NodeJS, R., Ruby, SQL, Windows Batch

Libraries: Pandas, Numpy, Matplotlib, Kotlin-Serialization, Tensorflow, Selenium, Boto3, Swing

Tools: AWS, Docker, Version Control (Git), Builds Control (Maven/Gradle), Android Studio, MySQL, MongoDB, Firebase

Certification: Intermediate Java Programming Certificate from Conestoga College;

Certified Quality Engineer from American Society of Quality;

Certified LabView Associate Developer;

Education

University of Guelph

May. 2021 - May. 2023

Master of Engineering in Computer Engineering

Guelph, ON

• Coursework: Software Design and Architecture (Java), Mobile Devices App Development (Android Studio), Cloud Computing (AWS), Introduction to Machine Learning (Python), Soft Computing (MatLab)

University of Waterloo

Master of Science in Physics

Jul. 2014 – Sept. 2016

Waterloo, ON

University of Waterloo and Dalian University of Technology (China)

Sept. 2010 - April. 2016

Bachelor of Science in Physics & Bachelor of Engineering in Electronics (Double Degree)

Waterloo, ON