

Experience

General Motors

Software Engineer, Infotainment Core-Apps

March 2017 - Present

Developer for GM vehicles' [Infotainment System](#). Involved in development of vehicle software for model years 2020 to 2022. Alongside my development responsibilities, I perform other functions, including reviewing change requests from other developers, mentoring new hires and contributing to sprint planning.

- Implemented critical features for Model Year 2022 Android Auto Application Launcher
 - Designed module to process updates to the application database to reduce the possibility for data corruption and enable recovery of app data
 - Improved performance of icon loading via a cache implementation
 - Integrated the application with the vehicle system's service to respond to loss of power and other system related events
 - Development was done with Java 8 on the Android P SDK
- Designed and implemented several automation tools using Python 3.7
 - Designed and lead the implementation of a tool to automate test execution, result analysis, and report generation. Said tool reduced the time to analyze test results by approximately 88%.
 - Contributed to the development of an AI Image Processing tool used to pre-process the results of automated test scripts. Processing was done with google tensorflow using the provided Python API. The tool reduced the occurrence of false positives by 70%.

Dell/EMC

Software Engineer - Networker Server

September 2015 - January 2017

Responsible for development of [Networker Backup and Recovery Solutions](#). Involved with feature improvement and maintenance of the software's server component

- Improved reliability and performance of components within the server module
 - Identified and fixed an undiscovered denial of service vulnerability within the RPC implementation
 - Improved the parallel execution of server tasks for better performance and eliminated resource deadlocks on certain workloads.
 - Resolved several defects in the messaging framework between client programs and the server
 - Developed multiplatform solutions in C/C++
- Used Python 3.7 to create test scripts to reproduce defects that involved complex interaction between clients and the server

AMD

Co-op, Apple Team

September 2013 - August 2014

As a co-op student, I was responsible for maintaining and extending features for several internal tools used in GPU encoding and decoding processes.

- Extended the amount of debugging information presented to engineers during GPU encoding/decoding video streams
- Assisted in porting a GPU emulator to Mac-OSX. I was responsible for building the UI application which configured and controlled the emulator
- Development was done with C and Objective-C primarily, on Mac-OSX systems

Education

McMaster University - Hamilton, Ontario

Bachelors of Engineering

2010 - 2015

Received my Bachelors of Engineering in Software Engineering with Co-op in the spring of 2015.

- Member of the Software Engineering Club where I was the representative for senior students

Design for Six Sigma - Green Belt

Received my Green belt in DFSS, for my role in creating a tool to automate CAN Bus signal testing. Currently on track to receive my Black Belt in DFSS later this year.

Technical Summary

Primary Skills

Java C Python CVS (Git/SVN/Perforce)

Secondary Skills

SQL HTML5/CSS3 Objective-C

Development Platforms

Linux (RedHat, OpenSuse, Ubuntu) Android Unix (Solaris, HP-UX) Mac OS X