David Louie

3rd year B.Sc Computer Science
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Technical Skills

Programming Languages:	Java, C++, C, Python, TypeScript/JavaScript, Assembly
Software:	IntelliJ, Android Studio, Vim, R Commander
Operating Systems:	Linux, macOS, Windows
Other:	JUnit, Git, GDB, UML Diagrams, LaTeX

Technical Work Experience

Facebook Menlo Park, CA
Software Engineering Internship May 2019 — August 2019

- Worked on the Constellation tracking system for the controllers of Oculus VR headsets
- Prototyped and implemented improvements to the online calibration using C++, allowing for reduced need to perform expensive factory calibrations and cost savings
- Visualized tracking improvements with Python, enabling easy comparison of uncalibrated, factory calibrated, and online calibrated performance

Intel Vancouver, BC
SoC Emulation Engineer (Internship) Sep 2018 — April 2019

- Wrote a Python script to handle the validation of new machines for use in TeamCity Continous Integration
- Integrated code coverage tool with TeamCity and Artifactory to make it much easier for developers to determine coverage, resulting in improved coverage
- Added new features to the virtual platform software emulation of an upcoming SSD using C++ and SystemC

Personal Projects

BudgetBunny *Java, Android Studio* Jan 2019
A receipt-scanning budgeting app made at nwHacks 2019.

- Used the Google Mobile Vision API to read the text in images taken with the app
- Implemented a parser using regular expressions to extract common items on receipts such as the store and the price
- Built the front end UI in Android Studio and connected it to the backend receipt processing

Academic Projects

Insight UBC *TypeScript, Node.js* Sep 2019 - Present
Full stack web development project to implement querying of UBC metadata.

- Implemented backend of the project in TypeScript and Node.js, enabling adding of data downloaded from the UBC website and queries of the data (e.g. find courses with an average greater than 80%)
- Connected frontend UI to a Web server allowing users to build a query using the UI, send it to a REST endpoint in the server, and render the results in the browser

Education

University of British Columbia Vancouver, BC
B.Sc. Computer Science *Average: 97%* Grad: Expected May 2021