Alex Wen

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SKILLS

Languages	C++, Python, Java, Javascript (ES6), C
Technologies	Cassandra, Numpy, SciPy, Node.js, React.js, Azure, Bluemix, Bash, Git, Vim

EMPLOYMENT

Instagram
Software Engineering   Jan. '18 – Apr. '18
- Authored a **Python** script to clean up dead archived data
- Added support for RocksDB as the storage engine for Cassandra secondary index
- Implemented a Cassandra secondary index using **Java** and created a **Python** API to expose the feature
- 99th percentile database read latencies were reduced by **72%**, and average read latencies by **46%**

Google
Software Engineering   May '17 – Aug. '17
- Launched confirmation dialog for destinations that were deemed too far away for the Google Assistant using **C++**, affecting **10%** of all navigational queries on mobile
- Worked closely with voice UI designers to improve Search categorical voice response in Java
- Created dialog using **C++** and **dialog frames** to iterate through results for Assistant on eyes-free devices, impacting **22%** of all categorical queries

NVIDIA
Camera Software Tools Engineering   Sept. '16 – Dec. '16
- Designed and developed an automatic **Python** Auto White Balance (AWB) validation framework
- Greatly simplified **C++** cross platform image tuning program using multiprocessing

Blue J Legal
Software Developer   Jan. '16 – Apr. '16
- Developed web apps using **React**, **Redux** frontend, **Node.js**, **Koa** backend, and **MongoDB**
- Authored **Node.js** and **Python** scripts to analyze and generate machine learning training data

Blackberry
Firmware Developer   May '15 – Aug. '15
- Developed Unix accelerometer, gyroscope and time of flight sensor drivers using **C** and **C++**

PROJECTS

Reflect Smart Mirror
github.com/ProjectReflect
- Aggregates relative productivity and health data through various RESTful endpoint calls

EDUCATION

University of Waterloo   Sept. '14 – Apr. '19 (expected)
Candidate for B.A.Sc. in Honours Computer Engineering, 4A   3.7 GPA