Saksham Aggarwal

Computer Engineering | saksham.a@hotmail.ca | github.com/aphsai | aphsai.github.io

Skills

Languages: Java, C, C++, Go, Python, JavaScript, Bash, HTML, CSS

Tools: Node, Express, React, React Native, TensorFlow, Unix, Latex

Experience

Software Developer | AssetHub May 2019 - Aug. 2019

- Refactored 4000+ lines in data processing pipeline decreasing runtime by 5x
- Maintained Angular front-end by resolving several outstanding bugs in cloud services
- Wrote Java scripts to efficiently tackle alterations and mass reformats of data

Front-end Developer | Shoplogix May 2018 - Aug. 2018

- Created data visualization module and implemented a caching database to minimize loading times
- Implemented authentication caching for OAuth to bypass React Native WebView limitations
- Optimized core product by revamping libraries and streamlining codebase, increasing efficiency and decreasing load times by ~10%

Data Analyst | iRestify Sep. 2016 - Jun. 2017

- Utilized Java and Selenium to extract information from various online databases
- Implemented scripts to clean and compose data into a format specified by user at runtime to allow for ease of use and portability

Projects

Hola Python, Rust, PyTorch | 2019

- Trained an encoder-decoder seq2seq model in PyTorch to predict phonemic pronounciation for words/names
- Built an audio generation pipeline to simulate human spoken pronounciation from RNN output

Grammar Bot Python, TensorFlow | 2018

- Trained an LSTM network to predict the highest likely form of punctuation following a continuous set of characters
- Leveraged the Python packages pandas, NumPy and TensorFlow for data-processing

CharityChain | Hack the North Solidity, React, Firebase | 2019

- Implemented a robust blockchain contract that tracked how charities spent their money
- Designed a front-end that allowed users to effortlessly donate to charities and easily track how their donations had been spent

Wasabi C++, SDL2 | 2019

- Built a 2D-platformer sporting an entity-component-system, efficient asset management, and quadtree based collision handling
- Utilized a data-oriented model to produce extremely flexible engine architecture

Education

Bachelor of Applied Sciences (Computer Engineering), University of Waterloo (2022)