

Saksham Aggarwal

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

Skills

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

Tools: Vulkan, Flask, RabbitMQ, AWS, Docker, Node, Express, React, React Native, TensorFlow

Experience

Software Developer | KitchenMate

Jan 2020 - May, 2020

- Constructed API to automate Jupyter Notebook execution by parameterizing inputs and outputs
- Developed machine learning model to predict menu and quantity of meals for new sites, decreasing waste by 12%
- Created and implemented experimental recipes workflow by automating A/B testing to sites

Software Developer | KitchenMate

Jan 2020 - May, 2020

- Architected machine learning platform and analysed waste reduction in order to optimize weekly inventory
- Increased user interaction and retention by ~6% through implementation of referral program and recipe categorizations
- Created a multi-processed repository of features with a built-in scheduler and UI to keep data up-to-date and easy to access

Software Developer | AssetHub

May 2019 - Aug, 2019

- Decreased runtime by 20% through refactoring 4000+ lines in data processing pipeline
- 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 introduced caching to minimize loading times
- Implemented authentication cookies 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%

Projects

Hola

Python, Rust, PyTorch | 2019

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

Education

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