Saksham Aggarwal

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

Skills

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

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

Experience

Software Developer | KitchenMate   Sep. 2020 - Dec. 2020

- Developed service to automate Jupyter Notebook execution and automatically backup and version using S3 buckets, reducing ML platform latency by 17%
- Implemented several enhancements such as location-based signup, customizeable surveys and push notifications heavily simplifying onboarding
- Designed and created experimental recipes workflow by automating A/B testing, data aggregation and analysis for different workplaces

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
- Implemented services 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 ~4%

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 speech from RNN output

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)