Austin **Chen**

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Education

University of Waterloo *Waterloo, Canada*
CANDIDATE FOR BASC IN COMPUTER ENGINEERING, 85% CUMULATIVE AVERAGE *Sep. 2017 - Apr. 2022*

Work Experience

Facebook *Seattle, USA (Remote)*
SOFTWARE ENGINEER INTERN *Aug. 2021 - Present*
- Working in the Remote Presence org, responsible for the client-side audio/video calling platform for Facebook and Messenger

Splunk *San Jose, USA (Remote)*
SOFTWARE ENGINEER INTERN *Jan. 2021 - Apr. 2021*
- Enhanced Splunk's release orchestration engine by extending support & testing for new Splunk architectures and adding cloud agnostic compatibility for both AWS and GCP, increasing support for automated upgrades by **15%** across the cloud fleet
- Owned development of load testing suite in **Go** and **Kubernetes** for the release orchestration engine, **automating** a **12+ hour** manual process to provision, upgrade, and deprovision a custom fleet of cloud instances
- Led the investigation and resolution of several Kubernetes operator issues related to unexpected pod restarts, race conditions between controllers, and reconciliation loops, proactively preventing issues with production fleet upgrades

Apple *Cupertino, USA (Remote)*
SOFTWARE ENGINEER INTERN *Jun. 2020 - Aug. 2020*
- Reduced runtime of data analysis program by **96%** through multi-processing statistical computations, optimizing **Pandas** usage, and eliminating I/O bottlenecks, significantly decreasing the approval time for hardware builds from 1+ hours to under 2 minutes
- Created **Python** package to pre-process CSV data for pipelines and convert data between different specifications for cross compatibility between internal analysis tools
- Implemented PTR analysis in a data pipeline to screen hardware validation data and detect issues with the measurement systems
- Built a modular performance benchmarking tool to automate benchmarking of code changes in **CI pipelines** and visualize results

Capital One *Toronto, Canada*
SOFTWARE ENGINEER INTERN *Sep. 2019 - Dec. 2019*
- Led the development of a telemetry system for internal packages, with features including a CLI tool, API, and email service
- Designed, built, and deployed a REST API to monitor package consumption, using serverless architecture on **AWS Lambda** with ALB/Route53 for load balancing & routing, and **DynamoDB** for noSQL database solution
- Developed reusable **React** components with **100%** unit test coverage for Capital One's in-house UI library, reducing the size of frontend codebases by up to **60%**

IBM *Toronto, Canada*
SOFTWARE ENGINEER INTERN *Jan. 2019 - May 2019*
- Built a message broker using **Node** and **Redis**, enabling developers to post service-status notifications to the IBM Cloud web console quickly and securely using Slack
- Developed new front-end features in React for Open Toolchains, IBM Cloud's DevOps offering used by **20 million** developers

Projects

Autocritic *Natural language processing*
PYTHON • DJANGO • SKLEARN *Dec. 2019*
- Developed a **Django** application that processes search queries for films and leverages sentiment analysis to predict their ratings

Watch Along *Web app*
NODE • WEB SOCKETS *Aug. 2018*
- Built a content consumption platform that allows multiple users to watch online videos synchronously with each other

Skills

Languages: Javascript, Typescript, Python, Golang, Java, PHP, Scala, C/C++
Fullstack: Node.js, React.js, Gatsby.js, Express.js, GraphQL, Flask, Django, MySQL, MongoDB, DynamoDB
Technologies: Linux, Git, AWS, GCP, Thrift, Kafka, Redis, Docker, Kubernetes, Hadoop, Spark