Sam Ip

CS+Stats Major | sam.qj.ip@gmail.com | sam-ip.github.io | linkedin.com/in/sam-qj-ip | Canadian Citizen

TECHNICAL SKILLS

Languages: Python, JavaScript, Java, C++, C, SQL(MySQL), NoSQL(Firebase, MongoDB), HTML, CSS
Technologies/Tools: AWS, React, Redux, Node.js, Docker, Flask, Express.js, Git, Jenkins, Axios
Cloud Certifications: AWS Certified Solutions Architect - Associate

EDUCATION

University of British Columbia Sep 2018 - Present
BSc Computer Science and Statistics | Expected Graduation April 2022 Vancouver, BC

WORK EXPERIENCE

UBC Department of Computer Science, Department of Statistics Aug 2019 - Present
Teaching Assistant (Software Engineering CPSC 310, Applied Statistics STAT 200, 251) Vancouver, BC
Technologies Used: TypeScript, Node.js, Git, Mocha, Chai, JUnit

- Mentor 150+ students for the course project through code and sprint reviews to build a full-stack web application querying university course metadata
- Lead office hours and weekly labs 8 hours/week to help 30+ students with API development, asynchronous programming, object-oriented design, versioning with Git, and unit testing

SAP (Analytics Cloud) Jan 2020 - Aug 2020
Cloud Infrastructure Engineer Intern Vancouver, BC
Technologies Used: Python, Jenkins, Docker, AWS EC2, IAM, CloudWatch, CloudTrail, DynaTrace, Kibana

- Partnered with development teams to monitor, design, and scale microservices/infrastructure for an enterprise application used by more than 1 million users/clients
- Created a Jenkins job automating the collection of high CPU crash/system dumps by 30% for distributed database systems
- Performed root cause analysis and disaster recovery to maintain 99.5%+ service availability

UBC Mobile Health Research Group Aug 2019 - Dec 2019
Software Engineer Intern Vancouver, BC
Flask, TypeScript, AWS S3, EC2, CodeBuild, CodePipeline

- Developed a web app using sentiment analysis and topic modeling to forecast 50+ gigabytes of time series patient-doctor conversational data throughout the treatment process
- Migrated the application to AWS and automated the deployment process using CodePipeline

TECHNICAL PROJECTS

Euphoria, https://github.com/annieliu10/nwhacks-2021
Technologies Used: GCP Natural Language API, Flask, Axios, Reddit API

- Designed a bot using natural language processing to analyze, and automate messages to users with signs of depression or suicidal behaviour on subreddit forums
- Invented a rule-based approach to identify and tag negatively reviewed posts
- Influenced product direction to find product-market fit and made technical decisions to deliver a minimum viable product within 24 hours at a hackathon (nwHacks 2021)

Riot Games Player Database, https://github.com/sam-ip/lol-player-database
Technologies Used: PHP, MySQL, XAMPP Apache+MySQL Database Server, Ajax Requests, HTML

- Designed a MySQL Riot Games Player database to store game session, match history, in-game statistics for Riot Games user for Valorant and League of Legends.
- Designed ER schema diagram to create relationships matching with Riot Games API data format

CourseFlo, https://github.com/CourseFlo/Flo
Technologies Used: MongoDB, Express, React, Node.js, Heroku

- Deployed a web application to provide a better course viewing experience to UBC students
- Implemented an in-house caching system for faster visualization of course information

Badminton Social, https://github.com/sam-ip/Badminton-Social
Technologies Used: React, Redux, Firebase, Express, Axios

- Built a full-stack web app for badminton players to post and share global badminton events