Sam Ip

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TECHNICAL SKILLS

Languages: Python, Java, TypeScript, JavaScript, PHP, SQL, R, HTML, CSS
Technologies/Tools: Express.js, Node.js, Git, AWS, Mocha, Chai, Flask, Docker, Jenkins, MySQL, Firebase

EDUCATION

University of British Columbia   Sep 2018 - Present
BSc Computer Science | Expected Graduation April 2022   Vancouver, BC
Relevant Courses: Computer Networking, Software Engineering, Data Structures, Algorithm Design/Analysis
Cloud Certifications: AWS Certified Solutions Architect - Associate

WORK EXPERIENCE

Microsoft, Incoming Software Engineer Intern   Fall '21
- Joining the Microsoft Teams Organization

Workday   May 2021 - Present
Software Development Engineer Intern   Remote, Canada
Technologies Used: AWS Lambda, CloudFormation, Terraform, Python, ElasticSearch, Gradle
- Backend/Infrastructure working on a document database service
- Reduced Costs of ElasticSearch EC2 clusters by 40% switching to Graviton2 type instances
- Optimized misconfigured Lambda Template files using Gradle scripts during deployment phase

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

SAP (Analytics Cloud)   Jan 2020 - Aug 2020
Cloud Infrastructure Engineer Intern   Vancouver, BC
Technologies Used: Python, Jenkins, Docker, AWS EC2, CloudWatch
- Partnered with development teams to monitor and scale microservices/infrastructure for an enterprise application used by more than 1 million clients
- Created a Jenkins job reducing the collection time of high CPU server crashes/logs by 30%
- 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
Technologies Used: Flask, AWS S3, EC2
- Developed a minimum viable product 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 to automate the release process using CodeBuild/CodePipeline

TECHNICAL PROJECTS

Euphoria, https://github.com/annieliu10/nwhacks-2021
Technologies Used: GCP Natural Language API, Flask, Axios, Reddit API
- Built a messaging assistant leveraging natural language processing to analyze, and automate messages to users with signs of depression or suicidal behaviour on subreddit forums

Riot Games Player Database, https://github.com/sam-ip/lol-player-database
Technologies Used: PHP, MySQL, 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.

Badminton Social, https://github.com/sam-ip/Badminton-Social
Technologies Used: React, Redux, Firebase, Express, Axios
- Deployed a full-stack social media web app for the badminton community sharing global events
- Created a REST API using Firebase writing cloud functions responding to user requests at scale