

RYAN (YUTONG) LI

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WORK EXPERIENCE

Software Development Engineer | Amazon Web Services

Jun 2023 – Present

- Software Developer on the AWS Deadline Cloud Cost Management team, developing features for the Deadline Cloud rendering service. Responsible for designing, refactoring, implementing, and testing complex customer-facing systems related to cost and monitoring, scalable to millions of customers.
- Led the load testing of customer-facing APIs prior to the launch using Locust library, identifying the bottlenecks and proposed changes that allowed the APIs to reach 500 TPS.
- Implemented a customer-facing feature “default budget action” that allowed for much improved customer budgeting
- Refactored internal pipelines and tests, reducing operations and cutting down code deployment times from 3 weeks to 2 days.
- Led the E2E, canary, and integration testing implementation and design of core deadline worker agent components after multiple customer-blocking COEs (correction of error) due to insufficient testing, leading to catching at least three regressions of the codebase afterwards
- Utilized Golang, Python, TypeScript, and various AWS services, including Lambda, DynamoDB, S3, and API Gateway.

Software Development Engineer Intern | Amazon Web Services

Apr 2022 – Aug 2022

- Designed and developed a scheduled usage reporting system using AWS EventBridge, Lambda, SQS, S3, and Step Functions for AWS Thinkbox customers to analyze render farm usages, scalable to millions of customers.
- Collaborated with multiple internal AWS teams to enhance scalability and reliability.
- Implemented error handling and Dead-letter queue alarms using Python and TypeScript CDK, coordinating various AWS services.

Software Development Intern | Demonware (Activision)

Jan 2021 – Aug 2021

- Created an irregularity monitor interface for Call of Duty game titles' crash database using CherryPy, JavaScript, MySQL, Kubernetes, Prometheus, and Grafana, analyzing hundreds of thousands of crashes each day.
- Implemented login authentication, daily database backups, and an editable configuration for irregularity thresholds.
- Developed a crash reporting NuGet package using C# and GitLab CI.

Software Development Intern | Hypatia Systems

Sep 2020 – Dec 2020

- Successfully developed and released the production version of the Hypatia Microsoft Office add-in for non-IE browsers, gaining 40 million+ downloads.
- Worked on debugging and implementing features for the add-ons, using JavaScript with jQuery, Semantic UI, and CSS.

Teaching Assistant | The University of British Columbia

Jul 2020 – Apr 2023

- Provided support as a teaching assistant for CPSC 221, CPSC 320, and DSCI 100 courses.
- Responsibilities included answering student questions, grading assignments, conducting office hours, offering feedback on group projects, and leading tutorials.

PROJECTS

Relational Datingbase – a Dating App

Aug 2020

- UBC CPSC 304 project. Web dating application developed with PHP and MySQL, featuring CSS for styling.
- Designed photo and text feeds, reaction capabilities, MySQL tables, complex SQL queries, and additional features.

GenkiVocab

May 2020

- Personal project. Android Studio Java application that provides a dictionary of Japanese vocabulary from the "Genki" textbook.
- Includes detailed information about each word fetched from an online JSON database.

EDUCATION

Bachelor of Science, Combined Major in Computer Science and Statistics

University of British Columbia | Vancouver, BC, Canada

Sep 2018 – Apr 2023

- Graduated with distinction and co-op, 90.1% average.

SKILLS

Languages: Bash, C, C++, C#, CSS, Go, HTML, Java, JavaScript, TypeScript, PHP, Python, R, SQL, XML

Software | Frameworks: Android Studio, CLion, AWS Lambda, Amazon S3, Amazon SQS, EventBridge, AWS Step Functions, DynamoDB, Git, GitHub, IntelliJ, Jira, jQuery, JSON, JUnit, Jupyter, Linux, MySQL, PyCharm, Slack, Visual Studio Code, Xftp, Xshell, Kubernetes, Docker, CherryPy, .NET