Joshua DeGrazia

GitHub://joshdegrazia
LinkedIn://joshdegrazia

Email : joshdegrazia@gmail.com
Mobile : +1 (206) 536-9528
Website : joshdegrazia.github.io

SUMMARY

Software developer with 5+ years of experience in the industry. Primarily works in microservice and fullstack web development using Java, AWS Cloud, and React. Most recently worked on the FC Games team at Amazon providing a gamification experience for warehouse associates, built on microservices hosted in AWS Cloud with a frontend in Unity.

SKILLS

LANGUAGES
- Java 8
- Java 11
- Python 3
- TypeScript
- CoffeeScript
- JavaScript (ES2015)
- C#
- C++
- Perl

TECHNOLOGIES
- React
- Unity
- Node.js
- SASS
- Webpack
- .NET
- Ruby on Rails
- Spring/Springboot

AWS CLOUD
- DynamoDB
- SQS
- SNS
- S3
- Route53
- Lambda
- Fargate
- EC2
- CloudFormation
- CDK
- CloudWatch
- API Gateway

TOOLS
- Markdown
- LaTeX
- Git
- Vim
- Sublime Text
- VS Code
- IntelliJ
- Rider
- Bash
- Zsh

WORK EXPERIENCE

AMAZON | Software Development Engineer II   Seattle, WA | December 2018 - Present
- Returned as an **SDE I** in December 2018 after successfully completing an internship. Produced gamification experiences to assist engagement of Amazon warehouse associates built on **AWS Cloud** microservices, primarily **Java 8** applications hosted with **AWS Lambda** and **API Gateway**.
- Promoted to **SDE II** in August 2020.
- Participated in an agile scrum process with two-week sprints.
- Coordinated with an external team to migrate a tier-1 tool for Amazon Fresh warehouses off **OracleDB** to an **AWS Cloud** solution utilizing **SNS**, **SQS**, and **DynamoDB**. Produced a large **Python** script for verification, which helped identify bugs in the external team's implementation.
- Designed and implemented a game where users are given missions to run, such as picking 20 units in 10 minutes, or being in the top 10% of performers for 20 minutes. Used **Java 8** hosted on **AWS Lambda** behind **API Gateway**, with **DynamoDB** as the data store. Implemented a frontend for the game in **Unity**.
- Designed and implemented a player matchmaking service to allow associates to race head-to-head easily, implemented using **Java 8**, **AWS Lambda**, **EC2**, **API Gateway**, and **DynamoDB**. Advised an intern on adding matchmaking capabilities to her project.
- Participated in bi-weekly **DevOps** reviews with an oncall rotation. Managed ticket queues, high-severity issues, bugfixes, and patching vulnerabilities in our code.
- Led **DevOps** effort to migrate existing **CloudFormation** architecture to the **AWS CDK** in **Java**. Successfully migrated 22 microservices and produced a common library of CDK constructs to reduce boilerplate and provide defaults, increasing readability and reducing architecture code by hundreds of lines per service. Mentored two **SDE II** members of the team to assist in the migration effort.
- Led **DevOps** effort to create **CloudWatch** alarms and dashboards for all 25 microservices owned by the team. During the **AWS CDK** effort, refactored the alarms and dashboards to generate automatically based off **Lambda** and **API Gateway** definitions.
- Designed and implemented a bug-reporting feature for our **Unity** frontend, which would call a **REST API** backed by **Lambda** to store reports in **DynamoDB**. Items in this table are later processed using **CloudWatch Events** and **Lambda** to export a daily report into **S3** for business consumption.

- Implemented numerous features on a management console for FC Games written in **React** with a small **Node.js** backend. This included a User Spoofer feature, utilizing existing **REST APIs** to allow developers to log in as a fake user and play the games; onboarding to an internal service for managing permissions to the website; and a large feature for creating image notifications via **S3** to directly send associates words of encouragement and praise from customers.
- Mentored an SDE intern who began as a warehouse associate and learned programming through Amazon's technical academy. Designed the backend architecture for a game where associates guess what items they will be asked to pick or stow throughout their day and coordinated with a UX team to design the frontend. Reviewed code, assisted with pair programming and questions. He was successful in his program and has since joined the team as an SDE I.
- Utilized **Unity**'s new Localization packages to provide internationalization and language settings for the team's frontend alongside two other developers.
- Kicked off the team's effort for integration testing the entire platform, and wrote full integration testing suites for three microservices, enabling continuous integration for those services.

AMAZON | Software Development Intern   Seattle, WA & Vancouver, BC | Summer 2017, Winter 2018
- January-April 2018: Worked on the FC Games team to deliver a gamification experience for warehouse associates. Created a scalable asset delivery system to satisfy memory management with tight hardware restrictions using **AWS Lambda** and **S3**. Redesigned and implemented the main menu in **Unity**. Created a user profile and avatar customization in **Unity**.
- June-August 2017: Designed and completed a large refactor of an internal emailing system in **Java** and **Spring**. Leveraged the new architecture to create an email filtering mechanism for users.

CHALK.COM | Software Engineering Intern   Kitchener, ON | September 2016 - December 2016
- Created a full-stack solution in **React** and **Ruby on Rails** giving administrators a feedback mechanism for teachers' lesson plans, including an aggregate page showing all feedback.
- Created PDF export options for records on teaching standards and attendance using an external **Node.js** library.
- Collaborated on the design and implementation of a large-scale **Ruby on Rails** backend refactor to allow grouping users by school, in addition to previously only being grouped by institution.

RPM TECHNOLOGIES | Software Development Intern   Toronto, ON | Summer 2014 & 2015, Winter 2016
- Winter 2016: Designed and implemented a **Python 3** project for generating and parsing large, encoded government financial records previously produced by the QA team by hand. Provided a UI for displaying the documents in a human-readable format.
- Summer 2014 & 2015: Created a compiler using **Perl** and **Java** to translate a large **Visual Basic 6** program to **C# ASP.NET**, vastly improving performance and reliability by rewriting core functionality using new tools.

EDUCATION

Bachelor of Computer Science (Honours)   Waterloo, ON | October 2018
University of Waterloo
- Completed in Spring 2018 term with a cumulative GPA of 77.95/100
- Graduated with Computer Science/Business Option (Honours) and a minor in Combinatorics & Optimization