

# Joseph D. Livni

SOFTWARE ENGINEER AT AMAZON

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## Experience

### Amazon

Seattle, Washington

SOFTWARE DEVELOPMENT ENGINEER

Jan. 2020 - Current

- A software development engineer on the AWS Elastic Block Store (EBS) Replication team.

### Qualtrics

Seattle, Washington

SOFTWARE ENGINEER

Jan. 2019 - Jan. 2020

- Increased the velocity of the development lifecycle for service migrations by integrating shadow testing infrastructure with real-time error analytics and dashboards.
- Built a diff analyzer that can handle various data types and group errors across multiple dimensions for user insight.
- Caught hard to detect API regression errors by piping error streams through an FPGrowth-Stream datamining service.
- Reduced Sev 1 and Sev 2 incidents through a json parsing and analytics service.
- Helped coordinate multi-team effort to safely deprecate old API endpoints.

### Qualtrics

Seattle, Washington

SOFTWARE INTERN

Jun. 2018 - Sept. 2018

- Developed and pushed to production a shadow testing service to decrease release candidate regressions through the use of a json parser to traverse, filter, compare, and return the differences in packet bodies.
- Increased throughput 20x with the implementation of a goroutine pool and Kafka queue integration.

### BHS Pharmacy

Eugene, Oregon

SOFTWARE DEVELOPER

Jun. 2017 - Apr. 2018

- Conceptualized and built a web application to facility the tracking and scheduling of medication for care facilities.

### Undergraduate Research, Security Lab (Prof. Jun Li)

Eugene, Oregon

RESEARCHER

Jun. 2017 - Sept. 2017

- Designed and produced an automated and scalable Twitter bot cluster to identify, collect, and analyze data from spam accounts by utilizing AWS Lambda instances, instantiated by the Python AWS API, Boto3.
- Increased application speed and saved hundreds of working hours by automating AWS security group instantiation.

### Stratus Digital Systems

Eugene, Oregon

SOFTWARE INTERN

Jun. 2016 - Mar. 2017

- Built production software that monitors, through AWS integrations, the uptime and stability of server cloaking, security clusters.

## Projects

### Load Optimized Chat Room

TOOLS: C++, UDP, NETWORKING.

2017

- Utilizes UDP transport layer to create custom server-client, chat room protocol.
- Optimized packet delivery load and speed through robust dynamic server clusters, flooding-pruning processes, and soft state.

### Quack Compiler

TOOLS: Go, C, Gocc, BNF.

2018

- Compiles a custom OOP language into runnable C code.
- Contains a scanner, parser, AST generator, typechecker, and code generator.

## Skills

**Programming** Python, JavaScript, Go, C/C++, Postgres, Elasticsearch, Git

**Web** Flask, Node.JS, React.JS, AWS, Docker

## Education

### University of Oregon

Eugene, Oregon

B.S. IN COMPUTER SCIENCE, GPA 3.7

Graduated - Dec. 2018

- Received the Summit and John R. Grossman Scholarship.

## Extracurricular Activities

2019 **Writer**, Have been published in two of Medium's largest technical publications.

Eugene, Oregon

2016 **Lead Organizer**, Quackcon (+150 person athletic hackathon).

Eugene, Oregon

2012-2016 **Debate**, Have competed nationally and have a winning record in collegiate debate.

Oregon