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ISAAC A. JENSEN

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EMPLOYMENT

Software Engineer, Intern	**McAfee**	**Mar. 2020 – Sep. 2020**

mVision ePO CloudSaaS Team
- Built Concourse CI pipelines which automate software delivery process for developers using resources, tasks, and jobs.
- Completed Docker-based metadata collection pipeline with consolidation into emailable HTML report.
- Achieved 100% code coverage building a unittest suite to test APIGateway lambdas, saving team from manually testing

Student Consultant	**Hewlett-Packard**	**Sep. 2020 – June 2021**

- Developed an automated PyTorch neural network data flywheel to improve performance with new data and increasing userbase. Jinja2 templating to display dynamic data
- Built/deployed Flask webapp and tuned for high throughput design space mapping (~100 design iterations/sec).
- Deployed HP's proprietary microfluidic image processing techniques

Software Engineer, Intern	**Vacasa**	**June 2021 – Aug. 2021**

- Worked with DevOps team during Vacasa's acquisition of TurnKey Vacation Rentals
- Locked down AWS EC2 instances due to pen test results (security vulnerabilities)
- Monitored EC2 instances with Zabbix, CI enhancements, Jira board tasks
- Fixed bugs surrounding AWS infrastructure, Salesforce backend

EDUCATION

Corvallis, OR	**Oregon State University**	**Fall 2017 – Spring 2021**

- B.S. in Computer Science, focus: Computer Systems. *GPA: 3.50 (Cum Laude)*

TECHNICAL EXPERIENCE

Projects

- **McAfee – Unittest Suite for APIGateway Lambdas** (2020). Used Mocha/Chai assertion libraries to test async JavaScript code with complex promises. Achieved 100% code coverage. Helped foreign teams integrate into my suite, giving them access to my tests and ability to contribute. Docker, *JavaScript, Node.js, AWS APIGateway, HTML/CSS, Mocha JS, Chai Assertion Library*
- **McAfee – Reporting Pipeline** (2020). Concourse CI pipeline w/ S3 backend which collects backend metadata from artifacts, consolidates into single HTML report containing testing results, version numbers, API hierarchy and more. Solves problem of developers searching through complex environments to find specific data. *AWS, Concourse CI, Python/Bash, YAML (configs), Docker, Beautiful Soup*
- **Custom Spotify API** (2021). Custom-made Spotify API with GraphQL schema, endpoint authentication with *JWTs*, rate limiting with *Redis (token/bucket alg.)*, and data stored in mySQL DB. All services running in Docker containers, in a single Docker network. *Docker, Express, mySQL, JavaScript ES6*
- **Python to C/C++ Compiler** (2021) Python to C++ compiler allowing Python code to be compiled into working C/C++ code (ability to be compiled via g++). *Flex* used for scanner, consisting of RegEx to identify syntactic categories/lexemes. GNU Bison used for parser, consisting of a context-free grammar to structure C++ program. AST visualizer made to show program in directed graph form. *Flex, GNU Bison, GraphViz, C/C++, Python*

ADDITIONAL EXPERIENCE AND AWARDS

- **Verizon App Challenge – Best in State (2014):** This application lets users take photos of certain pieces of trash and then prompts specific bins to place the trash in. Link to article: https://bit.ly/3qHIUbJ

Languages and Technologies

- Python3, C/C++, JavaScript [ES6], HTML/CSS, SQL/NoSQL DBs
- Docker, Flask, Django, Express, MongoDB, GraphQL, AWS [EC2, ECS, Lambda, APIGateway, S3], Node.js, Concourse CI, Git, Flex/Bison