BRADLEY SEAMONS

bnseamons@gmail.com | 669-264-0874 | bnseamons.github.io

Skills and Abilities

Java, JavaScript, HTML, CSS, Python, C++, Arduino, C, Node.js, Matplotlib, Bootstrap
AWS: Athena, CloudFormation, CloudTrail, CloudWatch, DynamoDB, EC2, ECR, EMR, Lambda, S3

Work Experience

Amazon Web Services (AWS) - Glue | Software Engineer   July 2021 - Present | Palo Alto, CA

- Led major team infrastructure changes to help with increasing Glue traffic.
  - Designed a new DynamoDB system that reduced the team's DynamoDB related alarms by 90%.
    - Developed and executed a 2 phase roll out plan to make sure changes could be rolled back if needed.
  - Drove migration to a new distributed system architecture that improved utilization and reduced costs.
    - Designed an online dashboard that synthesized various key metrics to help with monitoring.
    - Researched correlation between new instance parameters and a variety of results such as latency, utilization, availability to optimize usage of new instances.
- Designed a security system to keep track of unexpected account activity and respond to security threats.
  - Researched existing AWS security products and spoke to various teams on best ways to integrate them for Glue's needs.
  - Drove design meetings to make decisions on needed functionality of the system and how to navigate system limitations.
- Worked on bug fixes and features with a two week turn around.
  - Insisted on high standards of testing to ensure confidence deployment to production.
  - Called and led meetings with various teammates to come to an agreement on the best solution.
- Worked as a pageable on-call that responded to urgent deployment and customer issues.
  - Used Cloudwatch, Cloudtrail, Athena, and other AWS products to diagnose both internal and customer tickets.
  - Kept a thorough work log in ticket to maintain communication with customers while diving deep into issues.
  - Oversaw progress on tickets designed to improve the on-call experience.

General Motors (GM) | Hardware Engineering Intern   May 2020 - August 2020 | Warren, MI

- Worked on vision systems used in lane-keep assist technology.
  - Developed algorithm to determine where lane edge is based off road reflectors.
  - Implemented ladder logic for car response to road lane markers disappearing.
  - Troubleshot cameras that were causing inconsistent results in testing.
- Led a gear study to help the company improve quality of pinions used in 2 transmissions being produced.
  - Wrote PLC programs to automate measurement of key dimensions on parts allowing operators to run parts simultaneously.
  - Wrote a Python script to extract data from system logs and produce part summary produced each shift.

Phoenix Deventures | Software Engineering Intern   May 2019 - August 2019 | San Jose, CA

- Wrote a program in C to automate testing of needles on the company tensile testing machine.
  - Reduced the need for human supervision since the only manual part of the test is swapping out the needle.
- Developed a Python script that automates the creation of Engineering Change Order reports for new company parts.
  - Distributed program to company computers to standardize the report format.

Education

University of California, Berkeley   August 2017 - May 2021 | Berkeley, CA
B.S. Mechanical Engineering Major - 3.4 GPA

Clubs: Hispanic Engineers and Scientists, EnableTech, Space Enterprises at Berkeley

Projects

JARL- Just Another Robotic Limb   September 2018 - January 2021

- Used Fusion 360 to design the 3 axis prosthetic arm that can be operated by a quadriplegic patient.
- Utilized MATLAB optimization tools to optimize reinforcements needed in parts.
- Wrote Arduino code that can move fingers to close around differently shaped objects.
- Developed the Android app that runs on takes user input and sends commands to Arduino on arm.

Item-Eyes   January 2020 - May 2021

- Developed user interface for Item-Eyes app, an app that allows users to keep track of receipts.
- Used Ionic and Cordova with the Node.js platform to develop a web based app using JavaScript, HTML, and CSS.

Leadership

Glue Team Scrum Master   October 2021 - Present

- Led team sprint planning meetings, stand-ups, and discussions.
- Worked with managers to understand top-priority tasks and made sure they get assigned and completed.
- Worked with team members to reprioritize tasks when immediate needs arose.
- Followed up with team members unable to attend sprint planning about their workload.