EDUCATION

Bachelor of Science, Electrical and Computer Engineering

May 2021

The University of Texas at Austin

Overall GPA: 3.54/4.00

EXPERIENCE

Software Engineer, Amazon.com Inc

6/22-3/23

- Developed REST API for Amazon Ads DSP backed by AWS Fargate and DynamoDB for \$30M/year project, deployed through AWS CDK on CloudFormation using a CI/CD pipeline with onebox deployment, unit tests through JUnit, and end-to-end integration testing
- Wrote peer reviewed

Software Engineer, L3Harris Technologies Inc

Mission Communication Systems Products

6/21-6/22

- Extended rework of the User Admin panel by adding warnings, errors, and features that supported adding passengers alongside bug fixes and performance improvements
- Enhanced user experience of the WiFi panel by adding a scrollbar and clarifying capabilities of networks
- Developed over 1,900 lines of production-quality Java and SQL code, rigorously tested and peer reviewed

Software Engineering Co-op, L3Harris Technologies Inc

Sensor Software Team 1/20-6/20

- Implemented key feature of dwelling by enabling users to prioritize certain scans over others, with four different priority modes
- Designed and improved the flow of calibration data through the system by removing multithreaded access with no loss in performance
- Developed error response when given a scan command with an invalid configuration as well as blocked use of the test signal generator under certain scan configurations

Common Intelligence Collection Systems Group

6/20-8/20

Finished implementing messaging service by doubling the amount of information available to the user

Project Leader, Rig Automation Performance Improvement in Drilling (RAPID)

1/19-5/19

- Used machine learning to process drilling memos and extract key data such as hole depth
- Preprocessed text using NLP techniques such as stemming and regular expression tokenization
- Presented in February 2020 at the IADC/SPE International Drilling Conference and Exhibition

Data Science Intern, RAPID

10/18-12/18

- Plotted DTW path between time, bit depth, differential pressure, bit torque, and bit RPM with focus on the minimum for use in unsupervised learning
- Found minimum distance using FastDTW, pandas, and NumPy to determine time series similarity for use in clustering

PROJECTS

Rap Generator, Final Project, Data Science Lab

12/19

- Scraped lyrics to 500+ songs using, LyricsGenius, a Python library
- Utilized state of the art transformer learning model, GPT-2, to generate rap lyrics

Conference Connect, Senior Design

8/20-5/21

- Created wristband which trained a Linear SVC on data from a gyroscope, accelerometer, and RFID to achieve 88% accuracy at recognizing hand shakes
- Designed and 3-D printed a container out of PETG plastic to enclose sensors and Raspberry Pi W

SKILLS

Proficient: Python, Java Familiar: Linux (RHEL, Ubuntu), Git, TypeScript, SQL, C/C++, AWS CDK

ACTIVITIES

Eagle Scout: Lead book drive which sorted and donated 500 books to Overton Elementary