

Education

University of Texas at Austin

PURSuing B.S. IN COMPUTER SCIENCE AND MATHEMATICS

- Relevant Coursework: Neural Networks, AI, Software Engineering, Data Structures, Stochastic Processes

GPA: 3.92

Aug. 2018 - Exp. May 2022

Work Experience

Atlassian

SOFTWARE DEVELOPMENT INTERN

- Built architecture of end-to-end notification service from scratch using AWS SQS, and Lambdas
- Provided customers with automated notifications via email and a slack bot for events they had subscribed to
- Created fully-automated CI/CD through bitbucket pipelines with unit-testing, linting, and deployment into various environments

San Francisco, CA

May. 2020 - Aug. 2020

NCR

SOFTWARE DEVELOPMENT INTERN

- Rewrote legacy back-end API of application (Aloha) used by thousands of restaurant managers across the US
- Upgraded API to .NET Core from .NET Framework, and deployed application to Linux Docker running in Azure for better performance
- Ran automated tests using Gatling on API calls such as logging in and executing stored procedures on restaurant databases

Dallas, TX

May. 2019 - Aug. 2019

HomeAway

DATA SCIENCE INTERN

- Contributed to team of full time employees with data prep and sequence to a sequence machine learning model
- Annotated data and worked with text-based natural language processing

Austin, TX

Jan. 2019 - Jul. 2019

Projects

Predicting Stocks using Twitter Sentiments | Python (scikit-learn, pandas, nltk), Twitter API

- Utilized sentiment analysis from thousands of tweets to correlate the public opinion of a company with their stock prices
- Used machine learning algorithms to predict day-to-day changes in stocks taking into account tweet information and stock variance

Sep. 2019

Portfolio Website | React JS, Bootstrap, Github API

- Personal portfolio website that I created using React and Bootstrap
- Includes API calls to github that dynamically generates a display of my pinned repositories

Aug. 2019

Huffman Compression GUI and Backend | Java, Swing

- Bit level encoding algorithm with the ability to compress all file types
- Implements a Huffman Tree and a priority queue

May. 2019

Measuring Repetition in Speeches using LZW | Python, RStudio

- Analysis of how repetition has increased over time in US presidential speeches
- Implemented the Lempel-Ziv-Welch compression algorithm in order to measure repetition of words and phrases

May. 2018

Publications

A Pipeline for Vision-Based On-Orbit Proximity Operations Using Deep Learning and Synthetic Imagery

IEEE AEROSPACE CONFERENCE 2021

Mar. 2021

Real-Time, Flight-Ready, Non-Cooperative Spacecraft Pose Estimation Using Monocular Imagery

AAS SPACE FLIGHT MECHANICS MEETING 2021

Feb. 2021

Skills

PROGRAMMING LANGUAGES

- Python (numpy, pytorch, tensorflow, scikit-learn, pandas), Java, Typescript, C++, C#, SQL, x86, R

WEB/MOBILE DEVELOPMENT

- Android Studio, Node JS, React, HTML, Bootstrap, Git, \LaTeX , .NET, AWS (EC2, S3, Lambda, SQS, SNS), Azure, Firebase

Extracurricular Activities

Texas Spacecraft Laboratory (TSL)

SEEKER TEAM - LEAD PIPELINE ENGINEER

- Student-driven research group dedicated to designing and building hardware and software for space missions, in conjunction with NASA.
- Create full-pose estimation models ready for flight hardware along with streamlined data-generation and training pipeline

Feb. 2020 - PRESENT