Nalin Mehra

Gainesville, FL · nalinm01@gmail.com · (813) 420-0085 · https://github.com/NalinGHub

Education

University of Florida — Gainesville, FL
B.S. in Computer Science *GPA: 3.95* — Expected Dec 2022

Experience

American Express — Phoenix, AZ
SWE Intern - Data Architecture and Machine Learning Engineering — June 2021 – Present

- Developed and deployed ML model to increase domain knowledge for internal auto-feature engineering tool.
- Worked with Flask, Elasticsearch, and Scikit-Learn to create NLP model and API for React web application.
- Tested model accuracy and tuned hyper-parameters accordingly for optimal model output.
- Assisted creation of user-friendly portal to provide feedback for reinforcement learning on NLP model.
- Performed unit testing for backend API using Postman and Python.

Raytheon Technologies — Dallas, TX
Computer Engineering Intern - Radar Processing and Testing — June 2020 – August 2020

- Developed firmware for and tested radar processing cards used in F-15 fighter jet radar system using Lua
- Sourced FPGA card control data with TCL scripting to automate clock frequency verification test. Reduced test station operation time by ~10%.
- Utilized C# to program, test, and verify functionality for the Optical Controller Module (OCM).
- Developed a C# GUI to interact with and gather information from the OCM.

UF Solar Gators — Gainesville, FL
Telemetry — January 2020 – Present

- Developing Telemetry GUI and updating club website using Node.js, MySQL, and React.
- Developing a telemetry data session manager to improve documentation and troubleshooting.
- Updated telemetry collector for GUI following OSI Model using Node.js on Raspberry Pi.

Personal Projects

U-Pick - Restaurant Picker — May 2021 – Present

- Co-developed Flutter iOS/Android app to provide concise nearby dining options to a user.
- Implemented Google Maps Places API in Dart to display restaurant information and images.

Sentimental Critics - Natural Language Processing Project — April 2021

- Developed a new rating system for restaurants using written reviews and sentiment analysis.
- Utilized Selenium to scrape google reviews to gather data for training and testing of model.
- Created machine learning classification model using scikit-learn to calculate a restaurant's average rating based on positive/negative features of written reviews.

Splash - SwampHacks 2020 — February 2020

- Worked in a group of four to create an Android app to route to the user's nearest water fountain.
- Utilized GPS location data, Firebase Real Time Database, and React-Native.

Intel International Science and Engineering Fair — November 2018 – May 2019

- Created deep learning models using Pytorch to improve upon flash flood prediction models.
- Utilized time-series atmospheric data from the NOAA to facilitate the models.
- Worked with data using Python libraries such as NumPy, Pandas, ScikitLearn, and Matplotlib.

Skills

Languages:	Python, JavaScript, Dart, Java, C++, C#, Lua, Matlab, RISC-V
Technologies:	Git/ClearCase, Jira/Scrum, Flask, React, Elasticsearch, SQL, Linux CLI, AWS, Excel, vim

Awards

Herbert Wertheim College of Engineering Dean's List — Fall 2019 - Spring 2021
Awarded President's Honor Roll at the University of Florida College of Engineering.

Florida Benaquisto Scholarship Recipient — August 2019
Given a full-ride 4 year scholarship to the University of Florida.

National Merit Scholar — September 2018