# NALIN MEHRA

Gainesville, FL · nalinm<br/>01@gmail.com · (813) 420-0085 · www.nalinmehra.com

### **EDUCATION**

University of Florida

Gainesville, FL

B.S. in Computer Science GPA: 3.95

Expected May 2023

## SKILLS

Languages: Python, Go, C++, JavaScript, Dart, Java, C#, Lua, Matlab

Technologies: Flask, React, PostgreSQL, Elasticsearch, Spark, Linux CLI, AWS, Docker, Git, Jira, Excel

## 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.
- $\bullet$  Utilized Flask, Elastic search, and Scikit-Learn to create NLP model and REST API for React application.
- Tested accuracy and tuned Random Forest model hyper-parameters accordingly for optimal output.
- Assisted creation of user-friendly portal to provide feedback for reinforcement learning on NLP model.
- Performed 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

- Revising Telemetry GUI and updating club website using Node.js, MySQL, and React.
- Developing 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

- $\bullet$  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, Scikit-Learn, Pytorch and Matplotlib.

# 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

Merit based full-ride 4 year scholarship to the University of Florida.

National Merit Scholar

September 2018