Aamogh Sawant

aamoghsawantt@gmail.com | linkedin.com/in/aamoghsawant | github.com/aamoghS

Education

University of Central Flordia- College of Engineering

Expected Graduation | May 2028

- Candidate for B.S. in Computer Science
- Relevant Coursework: IB Computer Science. Intro to C, Discrete Math, Multivariable Calculus
- Certifications: Java and Python Microsoft Certification, CompTIA IT Certification

Experience

Kumon, Center Assistant, Jacksonville, Florida

August 2020-May 2024

- Assisted with tutoring students in advanced math subjects including calculus and higher-level reading focusing on grammar rules.
- Monitored students' progress by inputting scores from Kumon homework into the CMS (Kumon Database) system, which assigned further work based on the scores achieved.
- Cleaned up and organized the center's layout around the central area, aimed at reducing the likelihood of students contracting illnesses from one another.

First Robotics, Team Resistance Programmer, Jacksonville, Florida

August 2022 - April 2024

- Coordinated with teammates to build and program the appropriate components, extensively engaging with executive coaches to foster mechanical innovation
- Utilized Java in the software development of an industrial-sized robot to engage and execute field-based tasks and contests.
- Won regionals and placed 5th in nationals while competing against 50 regional and 3700 national teams.

- Produced data visualizations by analyzing the NFL Play-by-Play dataset from 2001-2021. Used Tableau to identify trends within the data and establish relationships by filtering 30,000+ data columns, building interactive dashboards, and designing relation patterns.
- Developed machine learning algorithm in Python with Random Forest Classifier learning models, Train-Test splits, and parameter tuning to create a predictive model for play type based on analytic parameters.
- Presented our model to the executive analytics team of both the NLP and NFL's Jacksonville Jaguars organizations on recognizing and predicting play calls in future games, including discussions on feature-importance and confusion matrices

Projects

Olympic Medal Counter

- Programmed an application with Python & BeautifulSoup to extract metal counts from the BBC website and produce a dictionary of every country.
- Created a data frame and chart using MatPlotlib and Pandas to display the metal counting and rank the countries based on most metals.

Music Analyzer

- Programmed an application with Python & Spotify Web API to extract track features and produce optimal playlists based on the client API key.
- Constructed an algorithm to display song pairings based on metadata such as genre and signature to create rankings of song matches.

Pass or Rush Football Model

- Expanded the model from my NLP internship to incorporate the user input of two teams and updated the dataset.
- Finetuned the model to reduce the false positives and true negatives to increase the accuracy from 68% to 80%

Skills

Languages: Java, Python, C#/C/C++, SQL, JavaScript, HTML/CSS, Swift

Technologies: Visual Studio, JetBrains IDEs, Jupyter/Python Notebooks, NumPy & Pandas, LaTeX, Tableau