Mathew Sabu

internshipmathewsabu04@gmail.com | (929)-402-5509 | LinkedIn |GitHub

EDUCATION

Adelphi University **Garden City, New York**
BS/MS in Computer Science *Expected Graduation, May 2027*
Minor in Mathematics

- **Concentrations:** Machine Learning/Artificial Intelligence
- **GPA:** 3.66/4.00 (Dean's List)
- **Related Coursework:** Linear Algebra, Statistics and Data Analytics, Algorithms and Complexity, Data Structures, Object-Oriented Programming, Calculus II, Database Management Systems, Discrete Structures.

EXPERIENCE

NASA **Houston, Texas**
Finalist *Feb 2024 - May 2024*

- Competed in the NASA MITTIC challenge against over **50+ universities** nationwide, successfully wining Phase 1.
- Leveraged NASA's solar-powered CO2 converter to develop a device aimed at reducing emissions from vehicle exhaust by **50%** in the transportation industry.
- Collaborated with a team of 5 to present our proposed solution to NASA experts at the Johnson Space Center, demonstrating its potential impact and securing **3rd** place.

Programming Tutor **Adelphi University**
Tutor *Sept 2023 – Present*

- Assisted over **100+ students** in understanding fundamental programming principles, algorithms, and data structures.
- Guided debugging code, troubleshooting errors, and optimizing program performance.
- Conducted one-on-one tutoring sessions for students in various programming languages and concepts.

PROJECTS

Facemask Detection - GitHub **New York, New York**
Python/Tensorflow/Scikit-learn/Matplotlib/Numpy *May 2024 - June 2024*

- Utilized Tensorflow to make a convolutional neural network (CNN) to build a face mask detection system, that detects the presence or absence of a mask in a given image.
- Executed Scikit-learn to train, test, and split the data, resulting in an impressive accuracy score of **95.9%**.
- Apply Numpy to prepare the data for analysis, ensuring peak performance of the model.

Breast Cancer Classification - GitHub **New York, New York**
Tensorflow/Pandas/Scikit-learn/Matplotlib/Numpy *April 2024 - May 2024*

- Utilized both Tensorflow and Keras to design and implement a neural network for classifying data as benign or malignant.
- Proficiently applied Scikit-learn to standardize and split the data, ensuring optimal performance of the model.
- Successfully trained, tested, and validated a predictive model with a remarkable **95%** accuracy in distinguishing between benign and malignant data.

Email Spam Prediction - GitHub **New York, New York**
Python/Scikit-learn/Pandas/Numpy *Jan 2024 - Feb 2024*

- Developed and implemented a Machine Learning solution using Logistic regression, to develop an email spam prediction system that determines if a given email is spam or not.
- Applied Scikit-learn to train and test the given data, ultimately predicting spam emails with a **96.6%** accuracy.
- Leveraged Python and Machine Learning libraries to pre-process the data, validating the ideal performance of the model.

CERTIFICATE

Machine Learning Specialization Certificate, Coursera (Stanford University) - Certificate **New York, New York**
Student *May 2024 - Present*

- Earned certification in Machine Learning, demonstrating proficiency in key concepts and techniques such as supervised and unsupervised learning, model evaluation, and neural networks.
- Acquired and applied skills in Linear Regression, Gradient Descent, Logistic Regression, and other related techniques.
- Learned and utilized unsupervised learning algorithms such as Anomaly Detection, Recommender System, Clustering.

TECHNICAL SKILLS

Programming: Python, Java, Git, SQL, R, HTML/CSS, JavaScript.
Tools: Jupyter Notebooks , VSCode, PyCharm, Eclipse, GitHub.
Frameworks: Pandas, NumPy, Matplotlib, Scikit-learn, Tensorflow, PyTorch, Spring Boot.