

Shanmukh Swaroop Srinivas

🌐 shanmukh11.github.io in shanmukh-srinivas

✉ shanmukhs99@gmail.com

☎ (413) 379-6137

EDUCATION

- **University of Massachusetts Amherst** Expected Graduation: Dec '22
Master of Science in Computer Science (Data Science Concentration) GPA: 4.0/4.0
- **Indian Institute of Technology (IIT) Madras** May '20
Bachelor of Technology in Chemical Engineering (Minor in Systems Engineering)

PROGRAMMING SKILLS

- **Languages:** Python (Fluent), C++ and Java (Familiar) **Web Development :** HTML, CSS, Javascript, PHP, MySQL, AJAX
- **Technologies:** Git, MATLAB, L^AT_EX, JIRA, Agile **Libraries :** Scikit-learn, NumPy, TextBlob, NLTK, Pandas, PyTorch

COURSEWORK

- **Graduate:** Machine Learning, Neural Networks, Secure Distributed Systems, Theory and Practice of Software Engineering, Advanced Algorithms, System Defense and Test
- **Undergraduate:** Data Structures and Algorithms, Graph Theory, Multivariate Data Analysis, Discrete Mathematics

EXPERIENCE

- **Aspen Technology** Skills: Python, Scikit-learn
Data Science Intern May '21 - Aug '21
 - Enhanced the functionality of **Aspen ProMVTM** - a Multi-Variate analysis tool used by chemical plants.
 - Researched and implemented various **Clustering** algorithms and performed deep-dive analysis on **historical time-series data**.
 - Constructed a **Failure-agent** with **10%** improvement in accuracy for Batch processes at Chemical plants.
- **JP Morgan Chase & Co.** Skills: Python, React.js, Django, Scikit-learn
Software Engineer Intern May '19 - Jul '19
 - Forecasted bank balances using a **Supervised Machine Learning** model with **99.73%** prediction accuracy, earning award as a part of JP Morgan Chase's **Global Hackathon**.
 - Visualized progress of employees using a **React.js** based web application in collaboration with a team of 25 people.
 - **Productionized** both the projects during the internship.
- **Real Tycoon - a digital marketing startup** Skills: Python, HTML, CSS, Javascript, PHP, MySQL
Software Developer Intern May '17 - Jul '17
 - Analyzed real estate data from a city and devised an algorithm to find the best location with minimal living costs, sought facilities and the best value for money.
 - Designed and developed a dynamic and modern website for a digital marketing agency, by incorporating **Javascript, PHP, and MySQL**.

PROJECTS

- **Lowest pollution route - Sangam ML Hackathon (Winner)** Skills: Python, Scikit-learn
 - Processed GPS pollution data from multiple mobile **sensors** & handled missing GPS data using vector calculus.
 - Built **Spacio-Temporal prediction models** using **LSTM** and **SARIMA** to visualize pollution levels and to find the route with the lowest pollution.
- **Cryptocurrency Trading Algorithm** [\[Github\]](#): Skills: NLP, Python, TextBlob, NLTK
 - Incorporated **Sentiment Analysis** on Scraped Relevant Articles and Swap Funding Rate.
 - Generated a profit of **~1200%** during backtesting.
- **SafeSpot - HackUMass VIII** [\[Github\]](#): Skills: NLP, Python, Flask, React.js
 - Constructed a **COVID-19 Safety Score** for any place on the globe on a scale of 0-5 using Scraped Google Reviews and **Sentiment Analysis** of Local Tweets about vaccines.
 - Leveraged **React** and **Flask** to develop a web application to take location as input and to display the corresponding Safety Score as output.