

SATHVICK SUDARSAN

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EDUCATION

RUTGERS UNIVERSITY

Master of Science in Data Science

New Brunswick, NJ

Expected May 2025

Relevant Coursework: Regression and Time Series; Data Wrangling; Data Mining; Software for Data Science; Statistical Learning for Data Science.

VELLORE INSTITUTE OF TECHNOLOGY

Bachelor of Technology in Computer Science with Specialization in Data Science

Vellore, Tamil Nadu, India

Jul 2019 - Apr 2023

Relevant Coursework: Machine Learning, Programming for Data Science; Statistics for Engineers; Applied Linear Algebra; Artificial Intelligence; Business Intelligence and Analytics.

GPA: 3.4/4

WORK EXPERIENCE

UNIVERSITY OF CHICAGO

Globus Labs Intern

New Brunswick, NJ (Remote)

Jun 2024 – Aug 2024

- Engineered a Python-based simulation project using PyBullet, incorporating procedural terrain generation and complex physics simulations.
- Refactored simulation code into modular components, enhancing code maintainability by separating noise map generation, terrain vertex creation, and simulation execution into distinct modules.
- Orchestrated the deployment of the simulation on Globus Compute, a platform for scalable distributed computing, by managing Python dependencies, and setting up remote endpoints for distributed execution.

NATIONAL UNIVERSITY OF SINGAPORE

Academic Research Intern

Singapore, SG

Dec 2022 – May 2023

- Completed intensive academic training in Machine Learning and Deep Learning, applying this knowledge to a sentiment analysis project on sportsmen using neural networks.
- Developed a metric to assess the impact of emotions on sports performance, receiving the highest 'O' grade for the project.
- Conducted remote research under NUS mentorship, focusing on Portfolio Optimization using Deep Learning.

FC MADRAS

Data and Performance Analyst Intern

Chennai, Tamil Nadu, India

Nov 2021 – Nov 2022

- Leveraged AI tools (Pixellot, PlayerMaker) to enhance player performance and injury prevention.
- Performed comparative player analysis using heatmaps and health metrics for performance optimization.
- Analyzed financial data across age groups to guide the academy's revenue strategies.
- Managed athlete data using Iterpro, ensuring accurate tracking and performance insights.

PROJECTS

WAR FIRE RISK PREDICTION

Dec 2023

- Analyzed war fire risks in Ukraine using regression techniques (OLS, Ridge, Lasso) and principal component analysis (PCA) to enhance prediction accuracy.
- Conducted hypothesis testing to evaluate the significance of principal components in predicting fire occurrences.
- Identified high-risk areas by analyzing proximity to conflict zones, aiding in targeted resource management.

PORTFOLIO OPTIMIZATION USING DEEP LEARNING

May 2023

- Developed a deep learning framework for stock price prediction, leveraging Bi-LSTM, LSTM, and GRU models.
- Integrated technical indicators (e.g., Moving Averages, RSI) to enhance prediction accuracy.
- Achieved high prediction accuracy by combining models using mathematical algorithms and GANs.
- Optimized model performance with efficient training and minimal overfitting.

TECHNICAL SKILLS

Computing and Programming: Python, C, C++, R, Tableau, SQL.

Data Science and ML Tools: Pandas, NumPy, Matplotlib, Seaborn, SciPy, Statsmodels, Scikit-Learn, TensorFlow, PyTorch.