

Aspiring data scientist with a solid foundation in mechanical engineering, seeking a role as a Summer Intern in the field of data science, to leverage an unique blend of analytical, engineering and programming skills.

EDUCATION

Master of Science , <i>New Jersey Institute of Technology</i> Data Science Computational Track <u>Relevant Coursework</u> : Applied Statistics, Introduction to Big Data, Data Management Systems Design, Advanced Database Systems Design, Machine Learning and Data Analytics with R Program	Sep 2023 - May 2025 NJ, USA GPA: 3.83
Bachelor of Technology , <i>SRM University AP</i> Mechanical Engineering Awarded with merit scholarship of 50% tuition fee for the entire bachelor's degree	Aug 2017 - May 2021 AP, India GPA: 3.52

SKILLS

Programming Languages	Python, R, Bash, C/C++, Java, Pig, Hadoop, MATLAB
Database Languages	SQL, MySQL, SQLite, PL/SQL, Oracle, BigQuery, MongoDB
Data Analytics	Spreadsheets, Pandas, Tidyverse, Matplotlib, Plotly, Tableau
	Git GitHub
	Cloud AWS EC2
Tools	IDE / Text Editor VS Code, RStudio, Sublime Text, KATE, Vim
	Documentation MS Office, LaTeX, R Markdown
	Operating Systems Linux, MacOS, Windows, UNIX
Libraries	NumPy, SymPy, Tensorflow, Keras, PyTorch, yfinance, Streamlit, ggplot

EXPERIENCE

Research Assistant <i>Under Dr. Jason T. L. Wang (Professor, Computer Science, NJIT)</i>	Oct 2023 - Present Newark, USA
<ul style="list-style-type: none">Integrated Explainable AI (xAI) tools and leveraged interpretability into machine learning and deep learning tools used for space weather research in collaboration with NSF / NASA (https://nature.njit.edu/solardb/)Incorporated xAI tools LIME, SHAP, PDP and ALE plots into a transformer-based framework "SolarFlareNet", used to forecast whether a $\geq M$-class flare occurs within 24, 48 & 72 hours using SHARP parametersSubmitted a poster paper for the 37th International FLAIRS Conference (link)	
Research Intern <i>Under Dr. Satya P. Jammy (Associate Professor, Mechanical Department, SRM University AP)</i>	Sep 2021 - Feb 2022 Amaravati, India
<ul style="list-style-type: none">Worked on a Science Education and Research Board (SERB) govt. of India project titled "Wall Effects in Shock Wave Boundary Layer Interaction"Contributed in the development of solver code in python for gaseous reactions and viscous propertiesValidated the solver for different flow configurations like Single ramp, Double ramp, etcPublished a conference paper in 26th National and 4th International ISHMT-ASTFE Heat and Mass Transfer Conference (link)	

PROJECTS

eComputer Store Database System <i>MySQL, Python, Streamlit, Pandas</i> <i>Data Management Systems Design Course Project</i>	Sep 2023 - Dec 2023 GitHub Link
<ul style="list-style-type: none">Designed and developed a working database for an eComputerStore with all mentioned functionalitiesFollowed a traditional approach for building database by designing an Enhanced Entity Relationship (EER) diagram, transforming the EER model to a Relational database schema and creating the database tables in MySQL using the Relational schemaDeveloped a web application using Streamlit which connects to the MySQL server using a pipeline	
MURPH <i>Python, SymPy, NumPy, OpenMP, CUDA, OP2-API, CFD</i> <i>In collaboration with Dr. Satya P. Jammy (Associate Professor, Mechanical Department, SRM University AP)</i>	Dec 2022 - Ongoing GitHub Link
<ul style="list-style-type: none">A Multi-dimensional (2-D/3-D), Unstructured-mesh and Reactions based Parallel solver for Hyper-sonic flow regimes (MURPH)New design approach is used to build the solver code in python, so that the parallel code generation can be fully automatedA 2D Ideal gas CFD solver is developed, capable of running parallel on multicore CPUs and GPUs using OpenMP and CUDA respectivelyWork is underway for integrating species reactions and development of a 3D solver	
AlgoTrade API <i>Python, yfinance, Pandas, Tensorflow, ks-api-client</i> <i>Personal Project</i>	May 2022 - Oct 2022 GitHub Link
<ul style="list-style-type: none">Fully automated NSE Stock/Equity trading-bot for Kotak Securities (KOTAK TRADE API) with integrated back testing and ML algorithms for price and trend predictionsThe bot gathers any desired stock's historical price data, performs technical analysis using technical indicators and places orders to the stock broker using the broker API	

CERTIFICATIONS

Google Data Analytics Professional Certificate <i>Coursera</i>	Dec 2022 - Apr 2023 Certificate
Algorithmic Trading & Quantitative Analysis Using Python <i>Udemy</i>	Mar 2023 - Apr 2023 Certificate