Sai Rapeti

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TECHNICAL SKILLS

Programming & Analytics: Python, SQL, R, Java, SAS, PySpark, AMPL, A/B Testing, Statistical Modeling

Visualization & Tools: Tableau, Power BI, Google Analytics, Excel, Flourish, DBeaver

Machine Learning: Classification, Regression, Clustering, K-Means, Neural Networks, Time Series Forecasting, LangChain Data Science: NumPy, Pandas, Scikit-Learn, PyTorch, TensorFlow, BeautifulSoup, Selenium, Pydantic, Matplotlib, Seaborn

Databases & Warehousing: MySQL, PostgreSQL, MongoDB, Snowflake, Microsoft SQL Server, Redshift

Certifications: Goldman Sachs: Operations, JPMorgan Chase & Co. - Quantitative Research, McKinsey Forward, MATLAB

Cloud, Software & Technology: AWS(EC2, S3, SageMaker, Athena), Azure, GitHub, MS Office 365(Excel, Word, PowerPoint, Publisher)

WORK EXPERIENCE

Quantitative Research

January 2025 - June 2025

New England Investment Consulting Group LLC, Boston, MA

- Developing and implementing algorithmic trading strategies to enhance returns and minimize market risks.
- Training large language models (LLMs) & curating specialized financial datasets to enhance model performance.
- Continuously explore, refine quantitative models to improve trading & investment strategies, keeping abreast of market trends.
- Collaborating with the risk management team to identify and mitigate financial risks in quantitative strategies.

Graduate Teaching Assistant

June 2025 - Present

Northeastern University, Boston, MA

- Facilitated workshops and labs on Python programming, AI, and deep learning (neural networks, backpropagation, optimization) for 200+ undergraduates, guiding them through real-world applications in image recognition and NLP.
- Designed and delivered curriculum, coding assignments, and case studies using TensorFlow and PyTorch, boosting hands-on student application of AI/ML techniques by 30%.
- Mentored students during office hours, evaluated projects, and provided feedback on model performance, scalability, and ethical considerations in AI.

Junior Data Analyst

September 2022 - December 2023

Code Facts Pvt Ltd, India

- Conducted predictive analytics and statistical modeling using pandas and scikit-learn to solve workforce planning challenges, performing regression analysis that optimized resource allocation strategies.
- Developed machine learning-based candidate scoring algorithms to streamline recruitment inefficiencies, implementing weighted scoring models that achieved 35% improvement in placement success rates.
- Built interactive dashboards and data visualizations in Tableau/Power BI by integrating multiple data sources, creating self-service analytics tools that improved stakeholder data accessibility by 40%.

Data Science Assistant

January 2022 - August 2022

Hochschule Kempten University of Applied Sciences, Germany

- Analyzed complex talent market trends using SQL and Python, providing insights, and identifying patterns for over 50 global clients, enhancing decision-making and increasing client satisfaction by 15%.
- Enhanced labor market forecasting by developing predictive models in R and implementing ML algorithms with Python's scikit-learn. Improved model accuracy by 20%, enabling data-driven workforce planning decisions.

EDUCATION

Master of Science in Data Analytics Engineering

September 2023- December 2025

Northeastern University, Boston, MA

Coursework: Data Mining, Data Management, Computation and Data Visualization, Story Telling, Natural Language Processing, Neural Networks and Deep Learning, Operations Research.

Bachelor of Technology in Computer Science and Engineering

July 2019 – May 2023

Vellore Institute of Technology, India

Coursework: Data Warehousing and Data Mining, Foundations of Data Analytics, Probability and Statistics, Programming with Python, Artificial Intelligence, Database Management System, Problem Solving using Java, Data Structures.

PROJECTS

- Deep Learning Model for Land Use
- Urban Spatial Order: Street Network Analysis
- Accelerometer Based Alcohol Consumption Detection
- Loan Approval Prediction
- Research Paper Summarization

- Crypto-Currency Market Dynamics
- Personalized Health Insurance Navigation System
- Block-Chain Based Digital Watermarking