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- April 2023**
Northeastern University, Boston, MA
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 and Algorithms, R.

ACADEMIC PROJECTS

- Deep Learning Model for Land Use
- Forecasting SPY with LSTMs
- 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