Sai Rapeti | Boston, MA

Contact: rapeti.sa@northeastern.edu | +1 (857) 398-7739 | LinkedIn

EDUCATION

Northeastern University, Boston, MA   **Jun 2025**
Candidate for Master of Science in Data Analytics Engineering   *GPA: 3.67*
Coursework: Data Mining in Engineering, Data Management for Analytics, Computation and Visualization, Foundations of Data Analytics, Natural Language Processing, Neural Networks and Deep Learning, Deterministic Operations Research.

Vellore Institute of Technology, India   **May 2023**
Bachelor of Technology in Computer Science and Engineering   *GPA: 3.5*
Coursework: Data Warehousing and Data Mining, Database Management System, Probability and Statistics, Problem Solving using Java.

SKILLS & CERTIFIC ATIONS

Languages & Technologies: Python, R, SQL, Java, AMPL, Mongo DB, Git.
Analytics and ML: NumPy, Pandas, TensorFlow, Scikit-learn, Keras
Visualization Tools: Tableau, Flourish, Power Bi, Matplotlib
Software: MS Office 360(Excel, Word, PowerPoint, Outlook, Publisher), MATLAB, Cloud (AWS, Google Cloud, Azure), Agile
Processing & Analytics: Geospatial Analysis, Business Intelligence, Financial Analytics & Problem Solving, Data pipelines, ETL.
Certifications: Goldman Sachs – Operations Simulation, JPMorgan Chase & Co. - Quantitative Research, Microsoft Power BI

PROFESSIONAL EXPERIENCE

New England Investment Consulting Group LLC   **Jan 2025 - Present**
Quantitative Research Intern   *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 and investment strategies, keeping abreast of market trends.
- Collaborating with the risk management team to identify and mitigate financial risks in quantitative strategies.

Code Facts Pvt Ltd   **Jan 2023 - May 2023**
Data Analyst Intern   *India*
- Conducted in-depth analysis of large datasets using Python to uncover key trends and relationships.
- Developed skills in data visualization and dashboard creation for effective communication of insights.
- Utilized Python, R, SQL, and VBA for advanced data analysis, statistical modeling, and manipulation, leading to a 20% improvement in accuracy and reducing decision-making time by 30%.

Indo Euro Synchronizatio   **Mar 2022 - Aug 2022**
Data Science Intern, with Hochschule Kemptem University of Applied Sciences   *Germany*
- Synthesized complex datasets, revealing key trends & patterns through statistical methods in Python and R.
- Created compelling visualizations with Matplotlib, Seaborn, and ggplot2, driving data-informed decisions.

PROJECTS

Deep Learning Model for Land Use   **Oct 2024**

Northeastern University, Boston, MA
- Conducting advanced analysis of satellite imagery with deep learning techniques to classify land use patterns, leveraging Python for data processing and model training.
- Gaining expertise in neural networks, image processing, and large-scale data management, enhancing analytical proficiency.
- Working towards a 50% reduction in manual classification time to support faster data-driven decisions and improve resource allocation.

Urban Spatial Order: Street Network Clustering Analysis   **Nov 2023**
Northeastern University, Boston, MA
- Conducted preprocessing and normalization of global urban spatial datasets to enable effective clustering analysis, utilizing Python for data scaling and transformation.
- Applied advanced clustering techniques, including K-means and hierarchical methods, to categorize cities based on street network configurations, employing the elbow method for optimal cluster determination.
- Gained insights into urban design variations by analyzing patterns in street orientation and configurations, thereby enhancing understanding of urban planning across different regions.
- Visualized and presented clustering results through dendrograms, facilitating clear communication of complex urban data patterns, which supports more informed urban development strategies and strategic planning.

Accelerometer-Based Alcohol Consumption Detection   **April 2024**
Northeastern University, Boston, MA
- Used accelerometer data to detect instances of heavy drinking, achieving a data integration success rate of over 95% by merging accelerometer readings with transdermal alcohol content (TAC) across multiple data formats.
- Engineered data preprocessing workflows that enhanced the dataset quality by 80%, enabling more reliable pattern recognition and analysis of motion data for health interventions.
- Implemented advanced machine learning algorithms, focusing on permutation entropy and complexity methods, which improved the detection accuracy of heavy drinking episodes by 30% compared to traditional methods.