Prakash Sai Alla

 Amherst, MA   +1 (413) 315-1598   ✉ palla@umass.edu   in linkedin.com/in/alla-prakash-sai

🎓 Education

University of Massachusetts Amherst, M.S. in Business Analytics   *May 2026*
Isenberg School of Management

- Cumulative GPA: 4.0
- **Coursework:** Data Management for Business Leaders, Business Intelligence and Analytics, Statistics for Business, Business Applications with Python, Project Management, Applications of Artificial Intelligence in Business

Jawaharlal Nehru Technological University Hyderabad, B.Tech in AI and ML   *Aug 2024*
Malla Reddy Institute of Technology

- Cumulative GPA: 3.2
- Developed a strong foundation in Machine Learning algorithms, programming, and computational thinking.
- Awarded Silver Medal in NPTEL's "The Joy of Computing with Python" for exceptional performance.

💼 Experience

PHN Technologies Pvt Ltd, Machine Learning Intern   *Apr 2023 – Jul 2023*

- Built and deployed supervised ML models including House Price Prediction, Iris Classification, and Resume Parsing.
- Conducted EDA, tuned hyperparameters, and applied preprocessing to improve model accuracy and reliability.
- Researched latest advancements to enhance existing workflows with state-of-the-art ML techniques.

Projects

Airbnb Demand & Availability Forecasting   *Jan 2025 – May 2025*

- Developed a Random Forest model to predict Airbnb booking likelihood, achieving 90% accuracy and 0.94 F1-score.
- Engineered and analyzed features like distance to city center, seasonality, and encoded neighborhood patterns.
- Delivered actionable insights to inform hosts' pricing, availability decisions, and Airbnb's market strategies.

Crypto Currency Price Analysis using Artificial Intelligence   *Jan 2024 – Jul 2024*

- Built an AI system for real-time cryptocurrency price analysis using machine learning algorithms.
- Designed predictive models based on historical data to forecast trends and market fluctuations.
- Applied preprocessing techniques to clean and normalize large datasets, ensuring accurate and reliable insights.

Semi-Supervised Machine Learning Approach for DDoS Detection   *Sep 2023 – Dec 2024*

- Designed a semi-supervised ML model that identified DDoS attacks with 94.8% accuracy using hybrid data sets.
- Improved threat detection on evolving patterns by incorporating anomaly detection and adaptive learning.
- Thoroughly validated the model for real-time threat detection in dynamic network environments.

🔧 Skills

Software: Excel, SQL, Numpy, Pandas, Jupyter, Tableau
Programming: Python, Java, C, HTML, Git
Soft Skills: Teamwork, Communication, Critical Thinking, Leadership
Data Science & Analytics: Machine Learning, Data Visualization, Statistical Modeling, Analytical Techniques

✸ Certifications

- Microsoft Certified: Azure AI Fundamentals
- Career Essentials in Generative AI – Microsoft / LinkedIn
- Career Essentials in Data Analysis – Microsoft / LinkedIn
- Machine Learning & Data Analytics – Infosys

📖 Publications

Semi-Supervised Machine Learning for DDoS Detection   *Nov 2023*
International Journal of Gender, Science and Technology

👥 Leadership

Street Cause, Coordinator   *Jun 2021 – Jul 2023*