Prashanth Javaji

+1 (346)599-8688 | Prashanth.Javaji@rice.edu | Houston, Texas, United States | linkedin.com/in/prashanth-javaji/

EDUCATION

RICE UNIVERSITY, Houston, United States - *Master, Data Science – GPA – 3.64/4*   **Aug 2024 – Dec 2025**
Relevant Course Work: Artificial Intelligence, Machine Learning, Data Visualization, Probabilistic Data Structures and Algorithms, Natural language Processing, Probabilistic Algorithms, Graduate Tools and Models in Data Science, Statistics for Data Science.
SRM UNIVERSITY, Chennai, India - *Bachelor, Computer Science, and Engineering* **-** *GPA - 9.42/10*   **Sept 2020 – Jun 2024**

TECHNICAL SKILLS

Programming Languages	**: Python, C, C++, SQL**, R-programming
Machine Learning & AI	**:** TensorFlow, PyTorch, scikit-learn, Generative AI, Large Language Models (LLMs), BERT
Big Data	**:** Apache Spark, PySpark, Hadoop (basic), Kafka (basic), NoSQL (MongoDB)
Data Analysis Tools	**:** Microsoft Excel, NumPy, Pandas, Matplotlib, Tableau
Web Technologies	**:** HTML, CSS, Bootstrap, Web Development (Django), AWS (EC2, S3, RDS), Snowflake
Certifications	**:** Machine Learning, Meta Backend Developer

WORK EXPERIENCE

Data Analyst, Rice University, Houston, TX   **Dec 2024 – Present**
- Designed and automated workflows for data integration, improving reporting efficiency by 20% using Python, Snowflake, and NoSQL databases. Developed interactive Tableau dashboards, providing actionable insights to Facilities & Capital Planning teams, leading to data-driven decisions.
- Collaborated cross-functionally to enhance data pipelines and optimize operational workflows, reducing manual efforts by 30%.

Teaching Assistant, Rice University, Houston, TX   **Jan 2025 – Present**
- Assist students in COMP 644 Data Privacy and Security with assignments, projects, and coursework-related queries. Ensure that students understand key concepts of privacy and security through discussions and problem-solving sessions.
- Conduct review sessions and discussions to help students grasp the principles of data privacy and security. Break down complex theories into simpler insights, connecting them to real-world cybersecurity challenges.

AICTE AI-ML Virtual Internship, SRM University, Chennai, TN, India   **May 2023 – Jul 2023**
- Gained hands-on experience with AWS Academy, working on AI-driven solutions.
- Implemented machine learning algorithms, including Random Forest and Gradient Boosting, achieving a 90%+ accuracy rate.
- Led the development of machine learning models to solve complex data issues, increasing prediction accuracy by 15%.

PROJECTS

Securing IoT Systems: Data Simulation and Cybersecurity Measures | Link   **Nov 2024 – Jan 2025**
- Simulated **1,000 IoT data points** using **5 sensor types** (accelerometer, location, binary sensors) to recognize 10 human activities while ensuring secure data handling.
- Developed a Python-based cybersecurity framework to analyze IoT system vulnerabilities, detect anomalies, and enhance data privacy and security.

Detection of AI-Generated Text with BERT Model | IEEE Publication   **Oct 2023 – May 2024**
- Designed and fine-tuned a **BERT model**, achieving a **92% accuracy rate** in distinguishing AI-generated vs. human-written text from **28,000 essays** by applying hyperparameter tuning.
- Applied advanced data preprocessing techniques (tokenization, text transformation) to improve model performance, leading to high **F1 scores** and balanced precision/recall trade-offs.

Prediction of Obesity Risk with Logistic Regression | Link   **May 2023 – Nov 2023**
- Implemented **logistic regression, random forest, and gradient boosting** to predict obesity risk, achieving **85% accuracy** by optimizing hyperparameters on a dataset of **1,100 individuals**. Enhanced predictive performance by preprocessing data (handling missing values, feature scaling) and fine-tuning models, improving prediction accuracy**.**
- Identified **key obesity risk predictors**, providing actionable insights that informed public health strategies and supported targeted intervention efforts.

EXTRACURRICULARS

Finance Committee Head, Aaruush-SRMIST, Chennai, TN, India   **Jan 2022 – Mar 2023**
Demonstrated leadership as the Financial Head of Aaruush, overseeing financial operations, managing a team to handle online ticketing via Townscript, and optimizing offline workflows with Excel.

Technical Head, Sri Ramanujan Mathematics Club, Chennai, TN, India   **Oct 2021– Feb2023**
Directed technical operations for Sri Ramanujan Mathematics Club, managing digital workflows. Directed technical operations for Sri Ramanujan Mathematics Club, managing digital workflows.

Smart India Hackathon 2022   **Mar 2022**
Led a team in the Smart India Hackathon to develop a full-stack file-passing management system, digitizing office documentation and reducing paper usage. Secured 5th place among 65 teams, showcasing teamwork and innovative problem-solving.