SATHEESH RAGUNATH

Data Science Enthusiast | Machine Learning | Deep Learning | NLP | Python | SQL

Pudukkottai, India | rsatheeshit@gmail.com | +91 6369382172

Portfolio: personal-portfolio-1-iila.onrender.com

LinkedIn: linkedin.com/in/satheesh-r-0b3850246 | GitHub: github.com/satheeshit

Professional Summary

Detail-oriented and analytical **Data Science professional** with practical experience building scalable **machine learning**, **deep learning**, and **NLP** models. Proficient in Python, SQL, and key data visualization tools like Tableau and Power BI. Proven track record of deploying AI-powered solutions, extracting actionable insights, and solving real-world problems through data-driven decision-making. Currently advancing expertise in **CNNs**, **RNNs**, and end-to-end **model deployment**. Seeking a challenging opportunity in a data-centric environment to apply analytical and problem-solving skills for business impact.

Virtual Internships

Data Science Virtual Internship — British Airways (Forage) | Mar 2025

- Implemented web scraping methods to extract customer behavior data.
- Built predictive models that improved trend analysis accuracy by 25%.
- Solved real-world data challenges simulating business decision-making scenarios.

Data Visualization Virtual Internship — Tata Group (Forage) | Feb - Mar 2025

- Designed impactful dashboards and visual reports to enhance stakeholder engagement.
- Boosted decision-making efficiency by 30% using clear, data-driven storytelling.

Projects

• Credit Card Fraud Detection System

 Developed a machine learning pipeline to detect fraudulent credit card transactions using Logistic Regression and SGD classifiers, addressing severe class imbalance with SMOTE. Achieved 99.9% overall accuracy and 89% recall for fraud cases; deployed real-time prediction via a Flask web app with dynamic user input and CSV-based online learning.

• Crime Rate Prediction System

- Developed a crime forecasting model using KNN and time series methods, achieving 97% accuracy, with performance metrics including $R^2 = 0.98$, MAE = 5569.11, and MSE = 10666.44.
- Implemented real-time email notifications for user registration and login, enhancing user experience and system interaction.

Intrusion Detection Using Deep Learning

- Developed a data-driven Intrusion Detection System using Multi-Layer Perceptron (MLP) for detecting and classifying network anomalies, leveraging real-time datasets like UNSW-NB15.
- Utilized Python, TensorFlow, and data preprocessing techniques to optimize model performance, achieving high accuracy in identifying cyber threats.

Core Skills

- **Programming**: Python, SQL, MySQL
- ML & AI: Classification, Regression, Clustering, Feature Engineering, CNNs, RNNs, NLP
- **Tools:** Tableau, Power BI, Jupyter, Flask, Git, VS Code, Excel, MS Office
- **Libraries:** Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, TensorFlow ,Keras XGBoost
- **Soft Skills:** Problem Solving, Communication, Team Collaboration
- Languages: Tamil, English, Sourashtra

Education

B.Tech in Information Technology

Pavendar Bharathidasan College of Engineering and Technology | 2020 – 2024 | CGPA: 7.8

Higher Secondary Education

Govt. Higher Secondary School, Sooriyur | 2019 - 2020 | 60%

Certifications

- Data Analytics MasterClass NoviTech R&D Pvt Ltd
- **Data Science Course** Future Wise, Trichy.
- Python Programming Certification
- Artificial Intelligence Workshop Certificate ----- Big Learn, Trichy.
- National Service Scheme (NSS) Volunteer