Ashutosh Kumar Tejaswi

GithubUnknown | Linkedin | Ash@gmail.com | +917251455525

Summary

Data Scientist with expertise in developing and deploying AI/ML solutions and data-driven applications. Proficient in Python for machine learning, statistical modeling, and predictive analytics. Skilled in data manipulation across various databases (MongoDB, MySQL, PostgreSQL), feature engineering, and creating interactive dashboards for compelling data visualization. Experienced in designing intelligent systems, optimizing models for performance, and deploying scalable solutions on cloud platforms. Proven ability to translate complex data into actionable business insights and build robust, user-centric analytical tools.

Projects

Rooftop Solar Energy Generation Prediction Code Link

- Developed a lightweight, scalable machine learning model for hourly rooftop solar output, showcasing proficiency in **data exploration, preprocessing, and model development**.
- Outperformed deep learning baselines with an optimized model, achieving **RMSE = 0.0391** and **R^2 = 0.9617**.
- Demonstrated proficiency in prototyping and testing by optimizing the model for deployment with a low average inference time (**6 ms**), enabling real-time integration.
- Documented development process and methodologies by authoring an **IEEE-format research paper draft**, comparing multiple models (CatBoost, LSTM, Bi-LSTM, GRU, Transformer).

Smriti AI – Instant Chatbot Generator Code Link

- Built a platform to generate fully customized, low-code chatbots in under a minute, leveraging **Generative AI frameworks** for company- and product-aware conversations.
- Enabled direct export of the chatbot as an **iframe script**, allowing users to embed a visually appealing, ready-to-deploy assistant on any website with minimal effort.
- Applied advanced **Natural Language Processing (NLP)** for multi-format data ingestion (text, PDF), ensuring accurate knowledge transfer and high-quality model training.
- Engineered a robust backend for efficient data parsing, cutting setup time by **over 90%** and making deployment accessible to non-technical users.

RTVNR & Location Tracking Code Link

- Built a **Real-Time Vehicle Number Plate Recognition and Location Tracking** system to help law enforcement quickly trace suspicious vehicles.
- Combined OpenCV, TensorFlow, and OCR to detect plates and store numbers with camera geolocation in a **MongoDB**-based backend for scalable, low-latency retrieval.
- Designed a lightweight Django interface for live monitoring with minimal compute overhead, developed during my **second year**.

Work Experience

AI Intern, Infosys Aug 2025 – Oct 2025

- Currently working with the AI team on Generative AI solutions involving Large Language Models (LLMs) and Natural Language Processing (NLP).

Trainee, IIIT Naya Raipur May 2025 – July 2025

- Led the development of 'SolarPredict,' a lightweight ML forecasting model, as the capstone project for the intensive training program, resulting in a submitted IEEE conference paper.

Intern, Krishna Vikash Group of Institutions (KVGI), Odisha Mar 2024 – Apr 2025

- Applied scalable backend design and API integration principles, later leveraged in deploying AI/ML models into interactive dashboards and real-time monitoring tools.
- Enhanced proficiency in HTML, CSS, JavaScript, and MVC frameworks, strengthening the ability to integrate AI systems into production-ready applications.

Education

Bachelor of Computer Science and Engineering Oct 2022 - Mar 2026

– Krishna's Vikash Institute of Technology

Certifications

- Vocational Training Certificate in Python Basics, Data Science, Artificial Intelligence, Machine Learning, and Deep Learning – IIIT Naya Raipur
- Infosys Principles of Generative AI Certification
- Infosys Artificial Intelligence Primer Certification
- Vocational Training Certificate in Machine Learning with Python – Rays IT and Design World
- Google Cybersecurity Professional Certificate

Skills

Programming Languages	Python, JavaScript, HTML, CSS
Frameworks & Libraries	TensorFlow, PyTorch, scikit-learn, React, Next.js, Django, OpenCV, Numpy, Pandas, Matplotlib, Seaborn
Domain Expertise	Generative AI, Large Language Models (LLMs), Natural Language Processing (NLP), Computer Vision, Data Science, Data Structure, Cloud Computing
Databases & Tools	MongoDB, Git, MySQL, SQL, Postgres, Redis, MS Excel, Power BI
Soft Skills	Problem-Solving, Communication, Adaptability, Collaboration, Creativity, Time Management

Publications

Ash, john *SolarPredict: A Lightweight Machine Learning Model Using Weather and Temporal Features.* Paper submitted to an IEEE INDICON conference, December 2025.