Ashutosh Kumar Tejaswi

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

Summary

Full Stack Developer skilled in building end-to-end web applications with expertise in JavaScript (React, Next.js), Python (Django, Flask), and scalable backend architectures. Experienced in designing RESTful APIs, integrating databases (MongoDB, MySQL, PostgreSQL), and deploying production-ready solutions on cloud platforms. Proficient in creating responsive frontends with React/Tailwind and optimizing backends for real-time performance. Strong foundation in AI/ML integration, data-driven applications, and interactive dashboards, bridging software engineering with intelligent system design. Collaborative team player with hands-on project experience and proven ability to translate business needs into robust, user-friendly applications.

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.