**JATHIN VARMA MANDAPATI**

Villa #80, Reliance Green Village, Mokila, Hyderabad| jatinvarma708@gmail.com| 7013224103 | <https://www.linkedin.com/in/jathinvarma/> | [GitHub](https://github.com/AgentMJ5)

AI Engineer with over 3 years of experience in machine learning and data analysis; recognized for designing an NLP-driven SQL chatbot that reduced query response times by more than 40%. Developed advanced machine learning models achieving a prediction accuracy of 95% for sustainable energy forecasts. Holds a master’s degree in Artificial Intelligence from Royal Holloway University of London.

**Work Experience**

**WATI (March 2024 - Present)**

**AI Engineer**

**Cybermindr Chatbot**

* Designed and implemented an NLP-driven SQL chatbot using Mistral 7B Instruct, which streamlined the conversion of natural language into structured queries; achieved a reduction in query response times exceeding 40% compared to traditional methods.
* Devised advanced visualization techniques with a focus on natural language processing features; provided users with intuitive insights leading to more informed decision-making processes across three major departments within the organization.

**Miscellaneous**

* Led the development and integration of automation and ML models into the workspace, enhancing operational efficiency and decision-making.
* Initiated machine learning solutions for threat intelligence in enterprise security, including data fetching from Splunk, anomaly detection using Isolation Forest, IP blocking, system isolation and alerting, enhancing security and operational efficiency.

**Digi Tele Networks (January 2023 - March 2024)**

**Machine learning Freelancer**

Developed and deployed advanced machine learning models, including regression and ensemble techniques, to enhance power generation forecasts for solar and wind plants; achieved 95% accuracy in prediction metrics based on localized weather data.

Learnings:

* Impact of weather parameters in renewable energy generation (Wind).

Extracted and processed localized weather data using PyNio and Xarray, achieving a streamlined workflow for reading GRIB files that enhanced forecast accuracy by improving data retrieval efficiency by 30%.

**Enercast GmbH (July 2022 - September 2022)**

**Machine Learning Intern**

* Conducted statistical inference on Enercast sandbox data from 150 wind energy and 40 solar power farms, proposed and developed new pre-processing models, resulting in a 15% improvement in predictive accuracy for energy production optimization.

**Delite Software Technologies (July 20 - July 21)**

**Software Engineer**

Customer/Project: Site IQ

End-to-End Remote Monitoring and Management Platform for Fuel Dispensers

* Launched Site IQ OMNI, a cloud-based platform for remote monitoring of fuel dispensers across 50+ gas stations; optimized data accessibility resulting in actionable insights that decreased response time by 40% during critical incidents.
* Module 1 - Dashboards, Module 2 - Alert Management Workflow, Module 3 - Analytics, Reporting.

**Education**

* **Royal Holloway University of London, UK. MSc Artificial Intelligence (September 2021- December 2022)**
* **PGP in AI & ML, Texas McCombs, University of Texas and Great Learning (December 2020- December 2021)**
* **Amrita Vishwa Vidyapeetham, India, Computer Science Engineering (August 2016- August 2020)**

Final year project publication: [Face Recognition based Attendance System](https://ieeexplore.ieee.org/document/9143046)

**SKILLS**

* *Machine Learning Techniques*: AWS, Machine Learning, MLOps, Deep Learning, Natural Language Processing, GCP Vertex AI, Predictive Modelling, Anomaly Detection, Feature Engineering, Model Deployment, Large Language Models (LLMs), Computer Vision. Data Science, Retrieval Augmented Generation (RAG).
* *Programming Languages*: Python, SQL, R.
* *Data Analysis Tools*: Pandas, NumPy, Scikit-learn, TensorFlow, Keras, Plotly.
* *Cloud and Containerization Technologies*: Docker, Kubernetes, TFX (TensorFlow Extended), Hugging Face.

**Certifications**

* **Machine Learning Engineering for Production (ML Ops) by DeepLearning.AI - Coursera**

[Certification for ML Ops](https://www.coursera.org/account/accomplishments/specialization/certificate/3EFCG9C5HAV9)

* **Generative AI with large Language Models by DeepLearning.AI - Coursera**

[Certification for Generative AI](https://www.coursera.org/account/accomplishments/verify/SVTKUX2Y9UAP?utm_source=link&utm_medium=certificate&utm_content=cert_image&utm_campaign=sharing_cta&utm_product=course)

*References can be provided upon request*