JATHIN VARMA MANDAPATI

AI ENGINEER

jatinvarma708@gmail.com | LinkedIn | Github | 7013224103

PROFILE

AI & ML Engineer with 2.5+ years of experience building automation systems and analytics solutions for enterprise clients, and 3+ years in software development. Skilled in leveraging machine learning, NLP, and deep learning to turn data into actionable strategy. Recognized by ADaSci as a **Certified Agentic AI System Architect**, reflecting expertise in designing next-generation multi-agent AI systems.

PROFESSIONAL EXPERIENCE

AI Engineer | Cybermindr (WATI Group) | Hyderabad | Apr 2025 – Present
- Built a vulnerability-reporting system using Python, FastAPI, GPT-4o, Pillow, Mermaid.js, producing clear VAPT reports from metadata and screenshots.

- Researched LLM Security with pytest, Garak, Promptfoo, DeepTeam, OWASP Top 10 LLM risks, self-developed playbooks and custom GPT judge for adversarial testing. The objective here is to automate vulnerabilities testing and providing with insights to ensure and mitigate prompt based vulnerabilities that comes with LLM usage.

- Enhanced Gitleaks with GPT-4, LangChain, adding classification and remediation guidance for secret leaks.

- Designed an RBAC-aware SQL chatbot using Mistral-7B-Instruct, LangChain, MySQL, FastAPI, Plotly, accelerating enterprise data access.

AI Engineer | WATI | Hyderabad | Mar 2024 – Mar 2025
- Prototyped assistants with LangChain, Hugging Face Transformers, OpenAI APIs, laying groundwork for cybermindr chatbot and RAG search.

- Implemented anomaly detection modules in Python, sckit-learn, Splunk, for internal analytics tools.

ML Engineer | Digi Tele Networks | Hyderabad | Jan 2023 – Mar 2024
- Developed forecasting models in TensorFlow, sckit-learn, XGBoost for renewable energy prediction

- Boosted GRIB file processing speed by 30% with PyNio and Xarray, Numpy, Pandas, analyzing weather factors affecting wind energy output.

Machine Learning Intern | Enercast GmbH | Remote | Jul 2022 – Sep 2022
- Performed statistical inference on Enercast sandbox data from 150 wind and 40 solar power farms.

- Proposed and implemented a new pre-processing pipeline, boosting power production prediction accuracy by 15%.

Software Engineer | Delite Software Technologies | Hyderabad | Jul 2020 – Jul 2021
- Designed Site IQ OMNI, a real-time monitoring platform for 50+ gas stations' fuel dispensers using Python, Flask, MySQL, Bootstrap.

- Led development of alert management, analytics, and reporting modules, cutting incident response times by 60% using Matplotlib, RestAPIs

EDUCATION

- **MSc, Artificial Intelligence**
  Royal Holloway University of London, UK | Sep 2021 – Dec 2022
  - Dissertation Project

- **BTech, Computer Science & Engineering**
  Amrita Vishwa Vidyapeetham, India | Aug 2016 – Jul 2020
  - Final year project publication

SKILLS

- **Programming & Tools:** Python, R, SQL, Git, Jupyter, VS Code, LangChain, LangFlow, AutoGen, OpenAI Swarm, LangGraph
- **ML/DL Frameworks:** TensorFlow, PyTorch, scikit-learn, XGBoost, Transformers, HuggingFace
- **Visualization & Storytelling:** Tableau, Matplotlib, PowerPoint, Streamlit
- **Cloud & DevOps:** AWS (S3, SageMaker), Docker, FastAPI, n8n, Zapier
- **Databases:** MySQL, PostgreSQL, MongoDB
- **Methodologies:** A/B Testing, Feature Engineering, ETL, Data Pipelines

CERTIFICATIONS

- Certified Agentic AI System Architect, ADaSci – 2025 Certification
- Machine Learning Engineering for Production (MLOps), DeepLearning.AI Certification
- Generative AI with Large Language Models, DeepLearning.AI Certification
- PGP in AI & ML, Texas McCombs, University of Texas, Great Learning | Dec 2020 – Dec 2021