ADUPA NITHIN SAI

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EDUCATION

Master of Science in Artificial Intelligence, *University of Michigan-Dearborn* **2024 - 2026**

Bachelor of Technology in Artificial Intelligence & Machine Learning, *JNTUH* **2020 - 2024**

EXPERIENCE

Research Assistant, *University of Michigan-Dearborn* **Nov 2024 - Present**

- Led the AI Transformation initiative in collaboration with AI researchers, boosting scientific research productivity by 20%.
- Developed innovative AI-driven solutions, enhancing model accuracy and contributing to high-impact research in social media, economics, and real-time AI applications. Optimized AI model performance using Python and PyTorch by 15%.

AI Developer, *Plausibility Solutions* **Nov 2023 - May 2024**

- Engineered and deployed machine learning models that improved predictive accuracy by 30%, directly contributing to more accurate business decisions by automating the hiring process.
- Created and implemented AI algorithms to automate business processes, reducing operational time by 25%.
- Led the development of an AI-based system that streamlined client operations, improving efficiency by 20%.

Devops Engineer Intern, *MoxieHawk Pvt Ltd* **Apr 2023 - Oct 2023**

- Configured and optimized CI/CD pipelines using Jenkins, reducing deployment time by 40% and enabling faster releases.
- Spearheaded the deployment of scalable AI architecture, facilitating the integration of 5 new AI-expert models.

Technical Developer Intern, *One Gear Technologies* **Nov 2022 - Apr 2023**

- Led the design and deployment of AI-powered web applications using HTML, CSS, and js, increasing users by 25%.
- Implemented backend optimizations, enhancing site performance and increasing traffic by 30%.
- Delivered key AI-driven features that improved the user experience, resulting in a 20% increase in customer satisfaction.

Developer and Test Administrator Intern, *Eunoia Innovations Pvt Ltd* **Mar 2022 - Feb 2023**

- Coordinated the deployment of intelligent system boats for automated data collection, improving operational efficiency by 40%. Conducted testing & optimization of machine learning algorithms, increasing system reliability by 20%.
- Built a Remote-Operated Survey Boat for the Indian Maritime University (IMU), enhancing data collection capabilities in marine environments. Led cross-functional testing of Artificial Intelligence systems, improving the accuracy of data processing by 15% and ensuring reliable research outcomes.

SKILLS

Technical Proficiency: Python, JavaScript, Java, Linux, Git, Flask, Django, Bootstrap, APIs, WordPress, Microsoft Office.
AI & Machine Learning: Skilled in Machine Learning, Deep Learning, Neural Networks, and deploying AI models.
Cloud & DevOps: Proficient in Vercel, AWS, Docker, Jenkins, CI/CD processes, MySQL, SQLite, RDBMS.
Data Analysis: Skilled in SQL, and advanced analytical techniques for extracting actionable insights from complex data sets.
Web Security: Experienced in Penetration Testing and API Testing (Postman).

PROJECTS

- **Multi-Model Detection System:** Assembled a high-accuracy deepfake detection system utilizing a multi-model approach to improve identification of AI-generated manipulations. Integrated custom-built and pre-trained models to boost detection accuracy by 30%, reduce false positives by 15%, and enhance media integrity against deepfake threats.
- **AI Classifier:** Designed and deployed a Python package using transformer models to classify text as AI-generated or human-written, accelerating classification speed by 25%.
- **Crop Recommendation System Using ML:** Engineered a machine learning system to offer tailored crop recommendations based on soil, climate, and user preferences, enhancing yield by 30%.
- **NSAencrypt:** Launched a Python package for encrypting and decrypting multiple media formats, securing sensitive data and attracting 200+ users within the first month.

PUBLICATIONS

Patents: Patent for an AI and Machine Learning algorithm to detect violence and non-violence percentages from real-time CCTV footage, achieving 90% accuracy (Patent Application No: 202341029626).
Research Papers: Data Encryption with RSA Cryptography, ICCCN 2024 - Explored secure frameworks for data sharing.
Journal Articles: A journal article on Machine Learning for the Detection of Violence from CCTV Live Footage in the Journal of Image Processing and Artificial Intelligence, achieving a 92% detection rate across 1,000 hours of footage.
Python Libraries: Created Deepfake Detector, a Python library to analyze and detect deep fake content in multimedia.