NITHIN SAI ADUPA

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EDUCATION

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

Bachelor of Technology in Artificial Intelligence & Machine Learning, **2020 - 2024**
Hyderabad Institute of Technology and Management (JNTUH)

EXPERIENCE

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

- Collaborating with AI researchers to drive the AI Transformation initiative, developing novel AI-driven solutions to enhance scientific research productivity. Contributing to cutting-edge projects using Python and PyTorch, optimizing AI model performance for a wide range of applications in healthcare, economics, and environmental science.

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

- Engineered and deployed machine learning models that optimized data-driven decision-making, achieving a 30% improvement in predictive accuracy. Innovated AI algorithms to automate business processes, reducing cycle times and increasing workforce efficiency, directly contributing to AI-based advancements for operational efficiency.

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

- Developed and maintained CI/CD pipelines using Jenkins, enhancing deployment efficiency and reducing delivery times by 40%. Automated cloud infrastructure using Docker and Kubernetes to support large-scale AI research and applications, ensuring system reliability and service availability, with a focus on scalable AI model deployment.

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

- Led the development and deployment of web applications utilizing AI and web technologies (HTML, CSS, JavaScript) to enhance user engagement. Conducted backend optimizations that resulted in a 25% increase in site traffic, directly improving the experience for AI-powered web tools.

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

- Coordinated the deployment of advanced AI systems for automated data collection, leveraging AI-based analysis to improve operational efficiency by 40%. Spearheaded cross-functional testing of AI systems, ensuring optimal accuracy in research outcomes.

SKILLS

Technical Proficiency: Python, JavaScript, Java, Linux, Git, Flask, Django, Bootstrap, APIs, WordPress, Microsoft Office.
AI & Machine Learning: Expertise in Machine Learning, Deep Learning, Neural Networks, and AI model deployment.
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

AI Research Platform for Smart Machine Control: Developed a cloud-based simulation platform for monitoring and controlling smart machines using AI, enabling seamless scaling of AI research and testing environments. This platform accelerates research development by providing flexible data pipelines for AI experiments.
AI Classifier: Developed and implemented a Python package utilizing transformer models to classify text as AI-generated or human-written, improving classification speed by 25%.
Crop Recommendation System Using ML: Designed a machine learning system providing tailored crop recommendations based on soil, climate, and user preferences, resulting in a 30% yield improvement for users.
NSAencrypt: Deployed a Python package for encrypting and decrypting 5+ media formats, securing sensitive data and gaining 200+ users in the first month with enhanced usability.

PUBLICATIONS

Patents: An Improved Algorithm in Artificial Intelligence and Machine Learning for Detecting Percentages of Violence and Non-Violence from Real-Time CCTV Monitoring, 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: Designed Deepfake Detector,a Python library capable of analyzing and detecting deep fake content in media.