



S KRISHNA NIVEDITHA

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Education

University of Florida, Gainesville <i>Master of Science in Computer Engineering</i> Coursework: Analysis of Algorithms, Advanced Data Structures, Data Science	Aug 2025 – May 2027
National Institute of Technology, Calicut <i>Bachelor of Technology, Electrical and Electronics Engineering</i>	Aug 2018 – May 2022 CGPA: 3.73

Experience

General Electric HealthCare <i>System's Engineer – Deep Learning</i> – Contributed to the API design and technical review of AIRx, an AI-driven prostate MRI slice prescription tool, enabling 4x faster scans with 5x fewer user interactions. – Translated geometrical logic prototyped in python into C++ microservices, improving throughput by 2.5x and reducing API latency by 20% through asynchronous processing and optimization. – Implemented unit and integration tests in a CMake-based CI/CD pipeline using Jenkins, enabling automated builds and deployments. – Developed a Flask service for data ingestion and retrieval from AWS S3 to accelerate ML pipeline workflows, improving data processing efficiency by 30%.	Jun 2024 – Aug 2025 Bengaluru, India
General Electric HealthCare <i>Engineer – Edison Engineering Development Programme (EEDP)</i> – Built an orchestrator to perform ETL for patient data transfer, replacing legacy Node-RED pipelines with AWS Step Functions and CloudFormation for advanced scheduling and triggering controls. – Integrated AWS services – API Gateway, S3, RDS, Lambda and CloudWatch within the orchestrator and reduced transfer latency by 16%. – Trained and fine-tuned deterministic deep learning models in TensorFlow, achieving 85% DICE score and subsecond inference with OpenVINO optimization.	Aug 2022 – May 2024 Bengaluru, India
University of Florida <i>Graduate Student Researcher</i> – Built and benchmarked differential voice-privacy algorithms in Python using PyTorch on HPC clusters, processed 10,000+ speech samples, and improved evaluation efficiency.	Sep 2025 – Present Gainesville, Florida

Technical Skills

Programming: Python, C++, Java, SQL
Machine Learning: TensorFlow, PyTorch, LLMs, Scikit-learn, NumPy, Pandas, Matplotlib
Web & Frameworks: Node.js, Flask, Spring Boot, React, TypeScript, HTML, CSS
Cloud & DevOps: AWS, GCP, Docker, Kubernetes, Jenkins, CI/CD, JFrog Artifactory
Databases: MySQL, MongoDB
Tools Git, Linux, HPC

Projects

Prompt-Driven AI Workflow Builder — <i>Node.js, Open AI, FireCrawl, Vercel</i> – Enhanced Open Agent Builder by FireCrawlDev with a prompt-based automation layer on its visual canvas, allowing users to generate multi-agent workflows instantly with natural language queries. – Implemented RESTful endpoints for Open AI API integration, automating node creation to cut setup time by 70%.	Nov 2025
AgriConnect Crop Prediction — <i>TypeScript, React, Gemini API, GCP, Vercel</i> – Built and deployed a crop prediction Node.js application at <i>Gator Hacks 4.0</i> enabling users to receive location-specific crop and yield forecasts in real-time for data-driven agricultural decision-making. – Integrated Google Grounding, Maps APIs, to deliver an interactive React UI with geospatial visualizations.	Oct 2025

Leadership and Achievements

- Presented a paper “*Optimal Glideslope Guidance Algorithm Development for Space Station Rendezvous*” at NCMDAO Conference 2022, IIT Bombay.
- Organized *Infinitum19*, an inter-school Mathematical Aptitude Test with 10,000+ participants as Assistant Secretary, Club Mathematica, NIT Calicut.