



S KRISHNA NIVEDITHA

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Education

University of Florida, Gainesville

Aug 2025 – May 2027

Master of Science in Computer Engineering

Coursework: Math for Intelligent Systems, Analysis of Algorithms, Data Science

National Institute of Technology, Calicut

Aug 2018 – May 2022

Bachelor of Technology, Electrical and Electronics Engineering

CGPA: 3.73

Experience

University of Florida

Sep 2025 – Present

Graduate Student Researcher

Gainesville, Florida

- Curated datasets and evaluated 10k+ child speech samples with PyTorch; benchmarked differential voice privacy algorithms, improved EER by 10%, adding protection against ASR systems at the Human Computer Interaction Lab.
- Optimized ML workloads on HPC clusters with SLURM and CUDA acceleration, reducing training time by 40%.

GE HealthCare

Jun 2024 – Aug 2025

System's Engineer – Deep Learning

Bengaluru, India

- Trained and optimized production-ready deterministic deep learning models in TensorFlow to power AI-assisted automatic slice prescription (AIRx) feature for prostate MRI, enabling scans 4× faster with 5× fewer user interactions.
- Automated end-to-end data ingestion to S3, enabling scalable model training and evaluation and fine-tuned model training parameters, boosting DICE score to 85% and delivering fast (<1s) inference with OpenVINO.
- Involved in the API design and development of the AIRx feature, translating geometrical logic prototyped in python into C++ microservices. Implemented test-driven development, achieving 90% code coverage.

GE HealthCare

Aug 2022 – May 2024

Engineer – Edison Engineering Development Programme (EEDP)

Bengaluru, India

- Developed GPT and BERT-based solutions for clinical report parsing and synthetic clinical text generation; applied Named Entity Recognition (NER) to 5,000+ reports, reducing manual annotation by 5 hours per week.
- Built an orchestrator to perform ETL for patient data transfer, replacing legacy Node-RED pipelines with AWS Step Functions and CloudFormation.
- Integrated API Gateway, S3, RDS, Lambda and CloudWatch within the orchestrator, reducing transfer latency by 20% and enabling enhanced scheduling and event-driven triggering control.
- Optimized C++ and Spring Boot microservices algorithms to reduce AIRx brain and knee scan times by 5% through adjustment of scan parameters and protocols, while maintaining optimal signal-to-noise ratio (SNR).

Technical Skills

Languages: Python, C++, Java, SQL

Tools: Git, Rally, Confluence, Jira, Cursor, Claude Code

Web: HTML, CSS, Node.js, TypeScript, Spring Boot, Flask, React

Databases: MySQL, MongoDB, Supabase

DevOps: Docker, Kubernetes, Jenkins, JFrog Artifactory

AWS: S3, EC2, Lambda, CloudFormation, RDS, CloudWatch

Libraries: TensorFlow, PyTorch, Scikit-learn, Pandas, NumPy, Keras, Matplotlib

Projects

Prompt-Driven AI Workflow Builder — TypeScript, Claude, FireCrawl, Vercel

Nov 2025

- Enhanced Open Agent Builder by FireCrawlDev with a prompt-based automation layer on its visual canvas, allowing users to generate and deploy AI agent workflows instantly. Powered by Claude and Firecrawl APIs, it streamlined workflow creation, cutting setup time by over 70%.

AgriConnect Crop Prediction — TypeScript, React, Gemini API, GCP, Vercel

Oct 2025

- Built an agentic crop prediction platform with React and TypeScript, integrating geocoding, Google Maps API, Google Grounding API, and Gemini AI APIs to provide location-aware crop and yield forecasts in real time; deployed via Vercel.

Leadership and Achievements

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