S KRISHNA NIVEDITHA

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EDUCATION

Masters of Science in Computer Engineering **Aug 2025 - May 2027**
University of Florida, Gainesville

Bachelor of Technology in Electrical and Electronics Engineering **Aug 2018 - May 2022**
National Institute of Technology, Calicut | CGPA: 8.65

TECHNICAL SKILLS

Languages: Python, C++, Java
Web Technologies: HTML5, CSS3, Node js , Springboot, Flask
Tools: Git, Rally, Confluence, Jira, Cursor, Claude Code
Operating Systems: Windows , Linux
DevOps: Docker, Kubernetes, Jenkins
Libraries: TensorFlow, Pytorch, Sklearn, Keras, Numpy
Databases: MySQL, MongoDB, Supabase
AWS: S3, EC2, Lambda, Cloud Formation, RDS, CloudWatch

EXPERIENCE

University of Florida **Gainesville, Florida**
Graduate Student Researcher **Sept 2025- Present**

- Contributed to research on speaker anonymization for child speech data at the Human Computer Interaction Lab; processed 500+ audio samples using PyTorch to compare the performance of native and diffusion-based anonymization methods.

GE HealthCare **Bengaluru, India**
System's Engineer - Deep Learning **June 2024 - Aug 2025**

- Trained 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. Oversaw end-to-end data management on cloud and model training pipelines, improving the production model's DICE score to 85%.
- Involved in the design and development of the AIRx feature, translating geometrical logic prototyped in python into C++ microservices. Implemented test-driven development, achieving 90% code coverage to ensure maintainable software.

GE HealthCare **Bengaluru, India**
Engineer - Edison Engineering Development Programme (EEDP) **Aug 2022 - May 2024**
Worked with 3 teams over the course of 2 years as part of the EEDP flagship leadership programme at GEHealthCare.

- Worked on Clinical Language Processing to develop transformer-based pipelines for clinical report parsing and synthetic data generation; applied Named Entity Recognition (NER) to 5,000+ reports, reducing manual annotation by 5 hours weekly.
- Built an orchestrator to perform ETL workflows for patient data transfer, replacing legacy Node-RED pipelines with AWS Step Functions and CloudFormation, and integrating API Gateway, S3, RDS, Lambda, and CloudWatch, improving transfer speed by 20% and providing enhanced scheduling and triggering control.
- Optimized C++ and Springboot 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).

Enzen Global Solutions Pvt Ltd **Remote**
Summer Intern **May 2021 - June 2021**

- Conducted end-to-end modeling, simulation, and debugging of 20+ solar PV–integrated smart grid networks using ETAP and MATLAB. Performed load flow and harmonic analyses to deliver data-driven compliance insights and enhance system reliability.

ACADEMIC PROJECTS

- **Radiology Quiz Bot** **Aug 2024 - Oct 2024**
  Developed a React-based quiz application with a FastAPI backend to assist medical students in diagnosing medical images. Built REST APIs for image upload, model inference, and quiz management, and integrated a fine-tuned transformer-based Medical Image Captioning model for diagnostic predictions.
- **Real Time Object Detection with Llama** **April 2025 - April 2025**
  Implemented real-time object detection using SmolVLM-500M served via llama.cpp. Explored agentic LLM workflows and the Model Context Protocol (MCP) through hands-on development of LLM-integrated applications leveraging tools such as Claude Code and Cursor.

LEADERSHIP AND ACHIEVEMENTS

- Presented a paper titled,'Optimal Glideslope Guidance Algorithm Development for Space Station Rendezvous in an Elliptical Orbit' at the National Conference on Multidisciplinary Design, Analysis, and Optimization (NCMDAO) 2022, IIT Bombay.
- Organized INFINITUM'19, an inter-school Mathematical Aptitude Test with 10,000+ student participants, as Assistant Secretary of Club Mathematica at NITC