

ADITYA V KALLAPPA

adityavk420@gmail.com | +91 7676636037 | Bengaluru, KA, India | [linkedin.com/in/aditya-kallappa/](https://www.linkedin.com/in/aditya-kallappa/)

OBJECTIVE

Skilled Deep Learning Specialist with hands-on experience in NLP, Computer Vision (CV), and Generative AI. Proven expertise in developing and deploying Large Language Models (LLMs), custom tokenizers, and AI benchmarks. Adept at leveraging PyTorch, CUDA, and advanced distributed training techniques to deliver scalable, real-world solutions.

TECHNICAL SKILLS

Languages: Python, C/C++ (Basics)

Tools & Libraries: PyTorch, CUDA, NumPy, Pandas, HuggingFace Transformers, SLURM, Bash

Key Expertise: Machine Learning (ML), Deep Learning (DL), LLMs, CV, NLP, Generative AI, Distributed Training, Linux, PEFT(LoRA), CUDA

WORK EXPERIENCE

Krutrim SI Designs Ltd., Bengaluru, KA, India

Data Scientist 2

July 2023 - Present

- Krutrim LLM Development:** Contributed to building India's first LLM trained from scratch.
 - Designed a custom tokenizer and managed data cleanup for 2.2 trillion tokens.
- Moderation and Safety:** Worked on moderation systems, static RAG (Retrieval-Augmented Generation), and WebRAG for Krutrim Bot to ensure reliable outputs.
- Krutrim-2 LLM:** Worked on continuous pretraining of Mistral-Nemo 12B model to expand support for Indian languages.
- Model Evaluation:** Conducted rigorous evaluation of models on diverse benchmarks, ensuring performance and scalability across key metrics.

ANI Technologies (Ola Cabs), Bengaluru, KA, India

Data Scientist

July 2022 - June 2023

- Applied **Deep Learning** across CV, NLP, TTS, and LLM domains.
- Key projects:
 - Cell Defect Detection:** Built a detection system achieving **95% accuracy**.
 - Traffic Sign Detection & Classification:** Delivered detection (~88%) and classification (~85%) models.

PUBLICATIONS & RESEARCH

Kallappa, A.; Nagar, S. and Varma, G. (2023). FInC Flow: Fast and Invertible $k \times k$ Convolutions for Normalizing Flows. In Proceedings of the 18th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications - Volume 5: VISAPP, ISBN 978-989-758-634-7; ISSN 2184-4321, pages 338-348. DOI: 10.5220/001187660000341

BharatBench: Comprehensive Multilingual Multimodal Evaluations of Foundation AI models for Indian Languages (2025). [KrutrimAI Team]
Available at: <https://ai-labs.olakrutrim.com/static/Bharatbench-report-4thfeb.pdf?ref=tech.olakrutrim.com>

Krutrim LLM(2024, Under Review). Kallappa et al. Model available at <https://huggingface.co/krutrim-ai-labs/Krutrim-1-instruct>

Krutrim-2 LLM(2024, Under Review). Kallappa et al. Model available at <https://huggingface.co/krutrim-ai-labs/Krutrim-2-instruct>

EDUCATION

Master of Science (By Research), Electronics and Communication Engineering

CGPA: 8/10

The International Institute of Information Technology – Hyderabad (IIIT H), Hyderabad, India

2019 – 2023

- Defended Master's Thesis titled "FInC Flow: Fast and Invertible $k \times k$ Convolutions for Normalizing Flows" where I have designed and implemented a fast CUDA kernel for invertible convolution

Bachelor of Engineering, Electronics and Communication Engineering

CGPA: 9.3/10

BVB College of Engineering and Technology, Hubballi, KA, India

2013 – 2017

ADDITIONAL INFORMATION

- Early IT Experience:** Prior professional experience in IT systems, developing foundational troubleshooting and reporting skills.
- Personal Interests:** Avid chess enthusiast with a passion for analyzing and following games closely. Enthusiast of history and culture, with a deep interest in exploring diverse traditions and historical narratives.