+91 7353079403
Bangalore, India
moyankg@iitbhilai.ac.in

Moyank Giri

IITian | Ex-OSU (Research Scholar) | Ex-HPE

Linkedin: linkedin.com/in/moyankgiri
github.com/MoyankGiri
moyankgiri.github.io/

Education

Indian Institute of Technology (IIT Bhilai) – M.Tech in Data Science & Artificial Intelligence (CGPA: 9.45/10) July 2023 – May 2025
Ohio State University, USA from IIT Bhilai – M.Tech Research Thesis in Large Language Models July 2024 – Feb 2025
PES University, Bengaluru – B.Tech in Computer Science and Engineering (CGPA: 9.0/10) Aug 2019 – June 2023
Coursera, Andrew NG, Stanford University – Online Course on Machine Learning Jan 2021

Skills

Languages and Tools Python, R, MATLAB, C, Java, Docker, Kubernetes, AWS, Prometheus, Grafana, Hadoop, Spark, Kafka, Storm, Android, PostgreSQL, MongoDB, Qdrant VectorDB, Hive, Firebase, Linux

DL/ML Techniques Computer Vision, NLP, Advanced RAG, Split Learning, Federated Learning, Generative AI, LLM, Explainable AI, CNN, LSTM/RNN, Distributed Deep Learning, ETL, Data Modeling and Mining

Python Libraries HuggingFace, PyTorch, Tensorflow, SKLearn, LIME, OpenCV, FastAPI, MatPlotLib, NumPy, Transformers

Experience

Role: Research Scholar / Project: Efficient Finetuning of LLMs **July 2024 — Feb 2025**
AI Edge Institute, Ohio State University *Columbus, USA*
- Utilized Python, LLM, LoRA, NLP, and Supercomputing environment, along with libraries like Huggingface, Transformers, Pytorch, and Numpy, to work on the efficient finetuning of LLMs in collaboration with industry experts using layer selection strategies and skip connections, resulting in a 10% reduction in finetuning time and significant savings in computational resources.

Role: Teaching Assistant / Project: Big Data Technologies **Aug 2023 — June 2024**
Big Data Technologies Lab, IIT *Bhilai, India*
- Configured and validated Big Data environments with technologies such as Hadoop, Hive, Spark, Storm, and Kafka, utilizing Docker, AWS, Python, Java, and Kubernetes, resulting in 100% fully functional and configurable lab environments.

Role: Storage R&D Trainee (Offered Full time employment) / Project: End-to-End workflow using Python **Jan 2023 — July 2023**
Hewlett Packard Enterprise (HPE, R&D) *Bangalore, India*
- Developed an end-to-end workflow in the HPE Storage framework using Python and libraries like Threading and ThreadPoolExecutor, resulting in a more than 70% reduction in execution time.

Role: Summer Intern (Offered Full time employment) / Project: CMT-SCTP Implementation **June 2022 — July 2022**
Muxable Labs, USA (India) *Bangalore, India*
- Contributed to open-source SCTP protocol library by developing CMT-SCTP protocol in Golang using Wireshark for analysis and adhering to IETF specifications, resulting in the successful implementation and functionality of the protocol.

Role: Intern / Project: Build an Always Observable AWS Application **Feb 2022 — July 2022**
Hewlett Packard Enterprise (HPE, R&D, India) *CCBD, PESU, Bangalore, India*
- Designed and built an always-observable cloud application on AWS using Python, Docker, Kubernetes, and Prometheus, Grafana, enabling real-time monitoring and analysis of application-level and service/POD-level metrics, resulting in operational efficiency and proactive alerting.

Publications

A-star Conference (MobiCom 2025 – Under review), Title: Benchmarking Multimodal AI for Telecom March 2025
Developed a multimodal benchmark addressing telecom-specific challenges. Conducted baseline experiments, improved LLM and VLM performance, and revealed gaps, guiding future research.
A-star Conference (KDD 2025 – Under review), Title: Robust and Efficient Federated Learning Feb 2025
Resulted in 100× lower computation cost and communication traffic with improved test generalization under data heterogeneity.
Journal of Applied Security Research, Title: Automated and Interpretable Fake News Detection with XAI May 2024
Developed a high-precision text and image-based news classification system, achieving an accuracy of over 92%.
IEEE Conference I2CT, Title: Enhancing Safety in Vehicles using Emotion Recognition with Artificial Intelligence April 2023
Developed an in-vehicle system (Accuracy: 83% video, 78% audio) with music recommendations to stabilize driver emotion.

Projects

AI Chatbot for Efficient Network Troubleshooting: Using RAG-enhanced LLMs, optimized performance & scalability Jan 2025
Lead and Interaction Management System: Built an end-to-end scalable system for tracking leads and interactions Dec 2024
Tweet Content and Behavior Simulation: Unified multimodal tweets for LLMs resulting in streamlined data handling. Dec 2023
Company 360: Leveraged deep learning for comprehensive company analysis, providing insights. Nov 2023
Automated Tailgating Detection System: Enabling real-time identification of tailgating incidents for enhanced security June 2022
Neural Music - Generation and Analysis: Web app to generate music, enhancing quality and flexibility for musicians. July 2020