MOYANK GIRI

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https://www.linkedin.com/in/moyankgiri/ | Preferred location: Bengaluru, India | Modified: 4th Oct 2024

SCHOLARSHIP

- MRD Scholarship - 2nd,3rd, 4th and 6th Semester (Top 20% in PESU)
- Distinction Award - 1st,5th Semester (SGPA > 7.0)
- Coding Ninjas: CodeKaze with Cash reward for College Rank 3

EXTRA CURRICULAR ACTIVITIES

- Inter-IIT Tech Meet: SAC 2023 (Research Paper Poster Presentation)
- Subject Matter Expert (**SME**) for course titled "Data Exploration, Analysis and Visualization" at PESU IO, PES University
- PES Innovation Lab: HashCode – Organiser and Panellist
- Coursera Machine Learning Course – By Andrew NG, Stanford University

NOTABLE PROJECTS

- **"Adobe Behaviour Simulation Challenge" Inter-IIT Tech Meet 2023**
  Skills: Large Language Models, Python Libs such as Tensorflow, HuggingFace etc
- **"Automated Tailgating Detection System" VMWare: Virtual Hackathon**
  Skills: MobileNetSSD, Object Tracking, Python Libraries such as OpenCV, imutils etc
- **"Neural Music - Generation and Analysis" Internship at PES Innovation Lab**
  Skills: RNN, LSTM, Python Libraries such as Music21, TensorFlow etc

EDUCATION

The Ohio State University, USA M.Tech Thesis Research (2024 – 2025)

- Sponsored by OSU (AI Edge Institute) as J1 Research Scholar from IIT Bhilai
- **Research Domain:** AI Edge, Split Learning, LLMs, Fine-tuning

M.Tech: IIT Bhilai in Data Science & Artificial Intelligence (2023 – 2025)

- CGPA: 9.12/ 10 (Till 2nd Semester), Date of Completion of M.Tech: June 2025
- **Relevant Courses:** Machine Learning, Adversarial Machine Learning, Advanced Data Structure & Algorithm, Parallelization of Programs, Computer System Design, etc

B.Tech: PES University in Computer Science & Engineering (2019 - 2023)

- CGPA: 9.0 / 10 with Specialization in "Machine Intelligence and Data Science"
- **Relevant Courses:** Machine Intelligence, Database Management System, Computer vision and Image processing, Data analytics, Statistics for Data Science,Data structures and its applications, Cloud Computing, Automated Information Retreival etc

PUC and 10th: Marks (90.6% and 10/10) , Passout (2017 and 2019)

TECHNICAL SKILLS

Programming Languages: Python, R, MATLAB, C, Java

Tools and Databases: Docker, Kubernetes, AWS, Prometheus, Grafana, Hadoop, Spark, Kafka, Storm, Android, PostgreSQL, MongoDB, Qdrant VectorDB, Hive, Firebase, Linux

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

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

EXPERIENCE (2+ YEARS)

1. At Ohio State University, USA as Research Scholar

Full-time, Onsite, $30000 /year (June 2024 - Present)

- Technical Skills: Split Learning, Python
- Summary: Improving Training and customization of LLM architecture for efficient execution/ deployment on Edge devices using systems approaches like caching, pipelining, quantization or ML techniques like boosting/distillation on high computing clusters and super computers.

2. At IIT Bhilai as Researcher and Teaching Assistant

1 year, Part-time, Onsite, Paid (July 2023 - June 2024)

Researcher at Sigma-Cubed Lab (S3 Lab)

- Technical Skills: Auto-encoder, ResNet18, LLM, NLP, Vector Database, Advanced RAG, Distributed Deep Learning, Python Libraries such as Pytorch, Matplotlib, etc
- Summary: Creating an **Efficient Split Learning Architecture** to reduce communication and address the issue of "Out-of-Order Distribution"
  Creating an **Efficient Advanced RAG** retrieval system for Finetuning LLM for network troubleshooting using open-source efficient models and self-hosted databases

PERSONAL DETAILS

- DOB: Sept 2001
- Address: Bangalore – 560093, Karnataka, India
- Passport(India), PAN Card, Driver's License – Available

LANGUAGES

Speak, Read, Write:
English, Hindi

- Teaching Assistant for Big Data Analytics Lab
- Technical Skills: Hadoop, Hive, Spark, Storm, Kafka, Docker, AWS, Python, Java etc
- Summary: Configured and Validated Big Data Environments on AWS and Conducted Tutorials, Hands-on Lab Sessions on Big Data Technologies

3. At Hewlett Packard Enterprise (HPE, R&D, India) as Trainee

6 Months, Full-time, Onsite, Paid (Jan 2023 - July 2023)

- Converted to Full Time Employment with 17.5 LPA CTC
- Technical Skills: Python Libraries such as threading, ThreadPoolExecutor etc
- Summary: Developed an End-to-End workflow using Python in HPE Storage framework to optimize execution time which resulted in more than 70% improvement.

4. At Muxable Labs USA (India) as Summer Intern

2 Months, Full-time, Remote, Paid (June 2022 – July 2022)

- Converted to Full Time Employment with Rs 13.2 LPA + RSU of 10,000$
- Technical Skills: Golang, Wireshark
- Summary: Implementation of CMT-SCTP protocol following IETF Specifications for Video streaming with minimum loss and latency.

5. At Hewlett Packard Enterprise (HPE, R&D, India) through HPCTY Program (from Cloud Computing and Big Data Club of PES University) as Intern

6 Months, Part time, Hybrid mode (Feb 2022 – July 2022)

- Technical Skills: Docker, Kubernetes, AWS, Prometheus, Grafana, gRPC, Python
- Summary: To Build a Always Observable Cloud Application on AWS to monitor and analyze the application-level and service/POD level metrics, and generate alerts.

PUBLICATIONS

1. Journal: Automated and Interpretable Fake News Detection with Explainable Artificial Intelligence (Journal of Applied Security Research 2024)

- Study makes use of Ensemble model and CNN Model to detect fake news which comprises of text and/or images and explains the prediction with XAI (1st Author)

2. Conference: Enhancing Safety in Vehicles using Emotion Recognition with Artificial Intelligence (I2CT IEEE Conference 2023)

- Study makes use of deep learning models (CNN Models) for automatic emotion detection from multimodal sources, including audio and video. (1st Author)

ACADEMIC PROJECTS

1. **"Company 360: A Deep Learning Approach for a complete analysis of companies"**
   Skills: ETL, Data Mining, LSTM, Transformers, Python Libraries such as HuggingFace, Transformers etc
2. **"Pattern analysis and Ambiguity detection for dataset" Real - Time Project**
   Skills: ETL, Data modeling, Python Libraries such as Pandas, Matplotlib etc
3. **Credit Card Customer Churn Prediction**
   Skills: Machine Learning models such as Random Forest, AdaBoost, SVM etc
4. **"Lifestyle Management Application" Android App**
   Skills: Java, Android, FireBase etc