KARTHIK YELURIPATI

sy493@njit.edu | Newark, New Jersey | Ph no: 8505673687 | Linkedin | GitHub | Portfolio | X | Google Scholar

EDUCATION

New Jersey Institute of Technology *Newark, New Jersey*
Master of Science in Data Science
Chaitanya Bharathi Institute of Technology *Hyderabad, India*
Bachelor of Engineering in Electrical and Electronics Engineering

RESEARCH PUBLICATIONS

Dharmoju, P. K., **Yeluripati, K.**, Guduri, J., & Palle, K. (2021, September). **Forecasting electrical demand for the residential sector at the national level using deep learning**. In *2021 International Conference on Artificial Intelligence and Machine Vision (AIMV)* (pp. 1-6). IEEE. [*IEEE Xplore*]

EXPERIENCE

AI Engineer *Berkeley, California*
Floz *July 2024- Sept 2024*
- Developed a RAG system using **Pinecone** for embeddings, enabling recommendations for 20,000+ construction items.
- Built a multimodal RAG system integrating **computer vision** to analyze architecture layouts and forecast project cost.
- Architected a high-performance, large scale **distributed processing** backend using **Typescript, Cloudflare D1**.

Software Engineer Intern *Englewood Cliffs, New Jersey*
NBCUniversal *Sep 2023- Apr 2024*
- Implemented test suites for NBC News websites across critical user flows using **Selenium WebDriver** & **TestNG**
- Conducted API and security testing using **Postman** & **Java**, enhancing API interfaces and overall application security.
- Analyzed and performed 200+ test cases in **TestRail**, ensuring 100% alignment and resolving security vulnerabilities.

Data Scientist Intern *River Vale, New Jersey*
STEERus *Jun 2023-Sep 2023*
- Developed a scalable web application for personality traits and talent assessments using **JavaScript** and **AWS**.
- Implemented a normalized database schema on **Amazon RDS** with **MySQL** optimizing concurrent user assessments.
- Performed statistical analysis to develop a novel trait-based scoring system and generated reports using **Tableau**.

Software Developer *Newark, New Jersey*
New Jersey Institute of Technology *Feb 2023-Jun 2023*
- Collaborated with *Prudential Financial* to build a monitoring system with an internal data pipeline using **React.js.**
- Leveraged **Ansible API** to automate system processes using **Python** and reduced configuration time by 60%.
- Designed Splunk dashboards and enabled real-time monitoring of key performance indicators for internal workflows.

Data Science Research Assistant *Newark, New Jersey*
New Jersey Institute of Technology *Nov 2022-Jan 2023*
- Applied advanced **NLP** techniques to analyze sentiment and extract themes from large-scale Twitter datasets.
- Implemented data preprocessing and tokenization using **NLTK** and **spaCy**, optimizing training on extensive datasets.
- Achieved 92% accuracy in topic classification using a fine-tuned BERT model and surpassed previous benchmarks.

Programmer Analyst *Hyderabad, India*
Cognizant Technology Solutions *Dec 2021- Jul 2022*
- Analyzed medical datasets using **PySpark** & **Hadoop** MapReduce, processing over 200GB of data to derive insights.
- Engineered real-time ETL pipelines using **Apache Airflow** and **Kafka**, reducing data processing latency by 30%.
- Performed large-scale data scraping of **EMR** patient records, life sciences, and hospital data, optimizing ingestions.

SKILLS & TOOLS

Programming Languages: Python, Java, Go, MySQL, R, Bash | **Deep Learning**: OpenCV, LLMs, Transformers, BERT, GPT, Langchain, NLP, Time Series Analysis, RLHF| **MLOps**: MLflow, Kubeflow, TensorFlow Extended (TFX), Weights & Biases| **AI Frameworks:** JAX, TensorFlow, Keras, PyTorch, Sci-Kit Learn| **Web**: System Design, JavaScript, React, Rest APIs, Selenium, GraphQL | **Big Data:** Hadoop, Hive, Spark, Pig, Kafka, Scala, Airflow | **Cloud Computing:** AWS (Bedrock, EC2, S3, RDS, EMR, SageMaker), Cloudflare | **Misc:** Docker, Kubernetes, Jenkins, OOPs, A/B Testing.