

BANDI SAI SATYA RAKESH

ssrakesh.band@gmail.com ◇ [linkedin](#) ◇ [Github](#) ◇ [+91 9492929825](#)

EDUCATION

National Institute Of Technology Raipur, India

2019 - 2023

Bachelor of Technology,Electrical Engineering

EXPERIENCE

Technical Lead

Oct 2023 -Present

Gen Ai Developer [HCL TECH](#)

Chennai, India

- Developed a tool to automate Automatic Test Equipment (ATE) testing case code generation using Generative AI, streamlining the testing process.
- Developed a code generation model using Large Language Models (LLMs) to automate PIN configuration test cases, fine-tuning it for a custom library and its API calls
- Designed and implemented a user-friendly interface that integrates seamlessly with the code generation model, significantly enhancing usability.
- Deployed web applications and code generation models on **Azure** cloud-based services, ensuring scalability and security.
- Created a private network to facilitate secure operations for OpenAI's Azure deployments, enhancing data protection and compliance.in Azure virtual desktop
- Enhanced model accuracy through fine-tuning of OpenAI's GPT-4 models, optimizing performance for code generation tasks.
- Developed a Chroma DB vector database to support Retrieval-Augmented Generation (RAG), for the API finder.
- Integrated the fine-tuned GPT-4 model with the Chroma DB to optimize **RAG** performance for the API Finder functionality.
- Validated results using the **Code BLEU** metric, ensuring high standards of accuracy and quality in generated code outputs.

Machine Learning Intern

June 2023 - July 2023

Swabhav Techlabs

- Worked on a project involving answering **data-driven questions** to **increase revenue** for an exhibition and provide insights for the business. Made decisions based on insights extracted from data analysis using statistical techniques ,Used **Numpy**, **Pandas**, **Matplotlib**, **Seaborn** and **Sci-kit libraries** for Data Analysis

PROJECTS

BhagawadhGita GPT: Fine-tuned a large language model on the Bhagavad Gita using parameter-efficient fine-tuning (PEFT) techniques, including LoRA and 8-bit quantization. Achieved a BLEU score of 2, demonstrating improved model performance and efficiency in handling specialized text. ([Project Link](#))

Wind power forecasting using machine learning: Wind power forecasting specialist with expertise in machine learning. Creates precise models for wind power prediction, excelling in data analysis, feature engineering, and model optimization. Demonstrated success in implementing advanced machine learning solutions for renewable energy. ([Project Link](#))

SKILLS

Programming Languages	C++,C,Python,Data Structures and algorithms,Stl
Technical Skills	Machine learning , Artificial Intelligence,Deep Learning natural language processing (NLP),Prompt Engineering,RAG Large Language Model(LLM),Data Analysis, Generative AI
Daatabase & Frameworks	Pytorch,Sql,Numpy,Pandas,scikit-learn
Tools	JMP,Git/Github,Hugging face

ACHEIVMENTS & RESPONSIBILITY

- Courses:Internshala Training in Machine Learning [Certificate](#) ,**Databricks** :Genrative AI Fundementals,Large Language Model:Application Through Production,SAS platform Courses
- Solved 500+ DSA Problems on : [GeeksForGeeks](#), [Leetcode](#),Secured 98.02 percentile in JEE Mains and 100+ Marks in JEE Advanced
- Community Facilitator at Placewit Raipur,Volunteer: Avartan Club,Tech Fest at NIT Raipur.