**BANDI SAI SATYA RAKESH**

GenAI Engineer – 1+ years | ssrakesh.bandi@gmail.com,+919492929825

## EDUCATION

**National Institute Of Technology Raipur** Btech

Electrical Engineering , 2019 – 2023

## EXPERIENCE

**HCL Technologies**, Chennai — GenAI Engineer(Technical Lead)  
Oct 2023 - Present

## ROLES AND RESPONSIBILITIES

* 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), improving data retrieval efficiency.
* 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.

**Swabhav Techlabs,** Machine Learning Intern

June 2023 - July 2023

## ROLES AND RESPONSIBILITIES

* Worked on a project involving answering data-driven questions to increase revenue for an exhibition andprovide insights for the business.
* Made decisions based on insights extracted from data analysis using statisticaltechniques ,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, demonstratingimproved model performance and efficiency in handling specialized text.

**Wind power forecasting using machine learning**: Wind power forecasting specialist with expertise in machinelearning. Creates precise models for wind power prediction, excelling in data analysis, feature engineering, and modeloptimization. Demonstrated success in implementing advanced machine learning solutions for renewable energy.

## SKILLS

**Programming Languages**: C++,C, Python, Data Structures and algorithms, Stl

**Technical Skills**: Machine learning Algorithms, Artificial Intelligence,Deep Learning, natural language processing (NLP),pattern recognition,Data Collection,Data Preparation,EDA, Generative AI

**Database & Frameworks**: Pytorch , SQL, NumPy, Pandas, scikit-learn, Stats Models

**Tools**: JMP,Git/GitHub, Hugging face,Azure

**ACHEIVMENTS & RESPONSIBILITY**

* Courses:Internshala Training in Machine Learning Certificate Databricks:Genrative AI Fundementals,LargeLanguage 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