SAIKAT SANTRA

+91 7076763129 | saikatsantra6396@gmail.com | LinkedIn | GitHub

Education

Indian Institute of Technology Kharagpur 2026
M.Tech in Agricultural Systems and Management *CGPA: 9.40/10.0*

Aditya Engineering College 2023
B.Tech in Agricultural Engineering *CGPA: 8.48/10.0*

Internship

Agent Mira Onsite
Applied AI Scientist Intern *May 2025 – July 2025*

- Developed a dynamic, multi-agent AI Property Recommendation System using CrewAI with task orchestration based on real-time user intent.
- Integrated CosmosDB for real-time property data fetching and FastAPI for backend APIs, supporting an interactive chat interface.
- Built a RAG-based Property Condition Report Generator combining internet search, property metadata, and AI summarization for generating comprehensive property intelligence.
- Designed dynamic analytics dashboards with client-level insights using modern data visualization frameworks.

Projects

Real Estate Data Analysis, Prediction, and Recommendation System | *Python, ML, Streamlit* Self Project

- Scraped and cleaned real estate data from 99acres, handling missing values and outliers for analysis and modeling.
- Engineered advanced features like luxury scores, property age, and room indicators to boost model performance.
- Trained and tuned an XGBoost Regressor model, achieving 90% accuracy in price prediction.
- Built a recommendation engine based on user preferences and deployed a Streamlit web app with maps, price predictor, and recommender.

PageDrafter – AI Website Generation Agent | *LangChain, LLMs, Agentic Ai* Self Project

- Developed an autonomous agent that generates complete websites from natural language prompts using LLMs.
- Converted user instructions into structured front-end code (HTML, CSS, JS) with modular and responsive layouts.
- Enabled non-coders to build websites dynamically through conversational UI.

Application of Generative AI for Sensor-Based Soil Analysis | *GANs, ML* Prof. S. Chakraborty, Ongoing

- Developing a GAN model to generate synthetic soil spectra data for data-scarce regions.
- Analyzing carbon credit trends and ESG certification rules to design AI-supported carbon trading pipelines.
- Building a platform for soil-based carbon credit verification and seamless buying/selling based on regenerative agriculture practices.

Technical Skills

Programming Languages: Python, SQL
Technical Skills: Natural Language Processing (NLP), Generative AI, Agentic AI, Machine Learning, Deep Learning, RAG, Multi-Agent Workflow, MCP, LLMs, Vector DB, Feature Engineering, EDA, Statistics
Libraries & Frameworks: Scikit-learn, Pandas, NumPy, Hugging Face, LangChain, LangGraph, Crew AI, Matplotlib, Seaborn
Tools & Platforms: MySQL, CosmosDB, Microsoft Azure, Git, GitHub ,Jupyter Notebook
Soft Skills: Time Management, Problem Solving, Teamwork, Adaptability, Communication, Critical Thinking

Relevant Coursework

AI Applications in Agriculture | Introduction to Programing | Geo-Informatics for Land Water Resources | Digital Soil Mapping | Systems Approach in Agriculture

Certifications

The Data Science Course Udemy
Generative AI Language Modeling with Transformers Coursera