

RAJARSHI ROY

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🌐 <https://github.com/Rajarshi12321/>

📍 Barrackpore, India

in [rajarshi-roy-learner](#)

🔗 https://rajarshi12321.github.io/rajarshi_portfolio/

☎ 8420999023

EDUCATION

B.Tech - CSE

Kalyani Government Engineering
College, Kalyani

📅 08/2021 - 07/2025(Expected)

8.9 cgpa
(upto 4th sem)

PERSONAL PROJECTS

Langchain_QA (Mar-Apr 2023)

→ The **Langchain_QA** app optimizes question answering by merging the **RAG** model with **Langchain's** document division and **Gemini's** vector embeddings. **FAISS** enhances query efficiency by swiftly storing and retrieving similar vectors. **Chainlit** for the user interface.

→ Leveraging **Gemini** as the **base LLM** empowers RAG, while **Langchain's prompt templates** ensure precise responses.

AI-reasearch-assistant (Mar-Mar 2024)

→ This is AI Research Assistant repository using Gen AI and **RAG** model. This **AI Research Assistant app** is powered by **Google Gemini**.

→ It helps in question answering about the provided research paper by uploading them through **Streamlit**, we save it in the Data folder and clean the document, index it by using **Llama-Index** using **Gemini Embedding Model**.

Anidex (Aug-Nov 2023)

→ Anidex is a **real-life pokedex** for knowing about animals on the spot by **scanning or clicking a picture of the animal**.

→ Then the app will respond to which **possible animal** is it **with a few basic details** in both text on screen and as a **voice message** like any voice assistant.

My Sweet Home (Jul-Nov 2023)

→ It **predicts** house prices and **recommends** similar housing properties from the database using content-based filtering.

→ **House Price Prediction:** When predicting the **accuracy** of housing properties for **sale**, it is approximately **90%**, whereas for **rental** properties, it is about **70%**.

→ **Property Recommendation:** Along with the house price predictions users will also get a list of **6 most similar properties** that match the given criteria and also show the **average percentage of cosine-similarity** for those 6 recommended properties..

TECHNICAL STACK

Data Science / Machine Learning / Deep Learning

Python, Data Visualisation, Supervised learning algos, Unsupervised Learning algos, ANN, CNN, NLP, EDA, LLM, Feature engineering, Feature selection & extraction etc.

Mathematics for ML & DL

Algebra, Probability, Statistics, Calculus, Matrices.

Python packages and Frameworks

Scikit-Learn, Tensorflow, Keras, NumPy, Pandas.

Web Development

Html, CSS, Flask, Django, Javascript, Chainlit, Streamlit.

Programming languages

Python, JavaScript, SQL, NoSQL, HTML, CSS.

Databases

Mysql, Mongodb, Postgresql, Pinecone, FAISS

MLops Tools

DVC, MLflow, ci/cd, github actions.

Cloud Deployment and containers

AWS ECR, AWS EC2, Vercel, Git, Docker.

Gen AI Framework and Models

LlamaIndex, Langchain, Google Gemini.

ACHIEVEMENTS

Winner of Smart India Hackathon 2022

Smart India Hackathon, Aug 2022

CERTIFICATIONS

Machine Learning Specialization Course

Coursera, Mar 2023

Deep Learning Specialization Course

Coursera, Mar 2023

Google Data Analytics Specialization

Coursera, Jan 2022

Mathematics for Machine Learning

Coursera, Mar 2023