Ronak Krishna Shrestha

ronakshrestha.org@gmail.com
9761895313
Sinchahiti, Lalitpur, Nepal

LinkedIn
GitHub
Portfolio
Twitter

Career Objective

To leverage my data science and artificial intelligence skills in a challenging and growth-oriented role, contributing to impactful projects and innovations in the technology sector. I aim to bring my strong analytical skills, problem-solving abilities, and a keen eye for detail to drive success and deliver results. I am eager to collaborate with a dynamic team and contribute to the company's goals and vision while continuously expanding my technical expertise and knowledge.

Educational Background

BSc (Hons) Computing with Artificial Intelligence **02/2023 – Present**
Islington College, London Metropolitan University

SLC **2022**
St. Xavier, Jawalakhel, NEB

SEE **2020**
Shuvatara School, Lamatar, NEB

Skills

Technical Skills:

- **Programming Languages:** Java, Python, HTML, CSS, SQL
- **Frameworks:** Numpy, Pandas, Matplotlib, Seaborn, scikit-learn, Django, PyTorch, TensorFlow
- **Applications:** Excel, Power BI, Git
- **Operating Systems:** Windows, Linux

Soft Skills: Critical Thinking, Communication, Teamwork, Problem-solving

Projects

Professional Projects

- **KMC Chatbot** (Kathmandu Metropolitan City)
  - **Languages used:** Python
  - **Technologies used:** LangChain, OpenAI API, Milvus Database, Vector Store
  - **Description:** Developed an advanced chatbot for Kathmandu Metropolitan City using a Retrieval-Augmented Generation (RAG) architecture, Milvus database for vector storage, and similarity search. Implemented enhanced query handling and document-based question answering for public service information.

Personal Projects

- **Predicting the Market Value of Footballers**
  - **Languages used:** Python, Jupyter Notebook
  - **Description:** Developed a model to predict the market value of football players based on selected features. Highlighted "ball control" as a key predictor through feature selection. Future work could expand on feature engineering, including one-hot encoding and enhanced correlation analysis. A potential website interface could enable users, such as coaches, to estimate player market values in real-time.
- **Fine-tune LLAMA with QLoRA**
  - **Languages used:** Python, Jupyter Notebook
  - **Description:** Implemented fine-tuning of Large Language Models (LLMs) like LLAMA using QLoRA (Quantized Low Rank Adaption), which quantizes the LLM to 4-bits to reduce memory usage. QLoRA allows efficient, low-memory adaptation of large models while preserving speed, and can be applied to models such as RoBERTa, GPT-2, and GPT-3. Developed with a focus on parameter-efficient tuning.
- **Sentiment Analysis with BERT**
  - **Languages used:** Python, Jupyter Notebook
  - **Description:** Built a simple BERT-based sentiment analysis model with a single-layer encoder. Created essential components, including a tokenizer and dataset class, and achieved a training accuracy of 71

Experience

Palm Mind Technology — Machine Learning Intern (08/2024 - 10/2024)
Developed chatbots using LangChain for various client websites.

Bajra Technology — AI Trainee (11/11/2024 - Present)
Selected for a highly competitive AI traineeship focused on building foundational skills in machine learning, deep learning, MLOps, and data engineering. This program emphasizes hands-on experience, enabling me to learn and apply AI concepts from scratch while gaining insights into end-to-end AI project workflows.

Certifications

Coursera Supervised Machine Learning

References

Pranchee Singh — pranchee.singh@islingtoncollege.edu.np
Bikash Thapa — thapabikash975@gmail.com