



Summary

Highly skilled AI/ML professional with expertise in Machine Learning (ML), Deep Learning (DL), and MERN stack development. Proficient in Python, PyTorch, Scikit-learn, and NumPy, with experience in Convolutional Neural Networks (CNNs), Generative AI (GenAI), NLP, Llama, LangChain, and Large Language Models (LLMs).

Education:

Netaji Subhash University of Technology, Dwarka	2020-2024
B.Tech.- Instrumentation and Control Engineering- 7.30 CGPA	Dwarka, Delhi
R.P.V.V. Sec-19, Dwarka	2019
Class XII- CBSE- 91%	Dwarka Sec-19

Experiences:

- Knowledge Synonyms (AI Engineer Trainee)** Nov 2024 – Present
 - Developed and fine-tuned **NLP** models using **Python** and Hugging Face Transformers to create an **AI-powered chatbot** for real-time question-and-answer assistance.
 - Worked on recommendation engine leveraging **collaborative and content-based filtering techniques with Python, Pandas, and scikit-learn** to provide personalized learning paths.
 - Designed and implemented an adaptive quiz system using **reinforcement learning** with **PyTorch** and **Stable-Baselines3** to dynamically adjust question difficulty based on user performance.
- Qspiders (Training) – Software Developer (MERN)** June 2024 – Sep 2024
 - Developed and maintained web applications using **MERN Stack (MongoDB, Express.js, React.js, Node.js)**, ensuring high performance and scalability.
 - Utilized **frontend technologies (HTML, CSS, JavaScript)** to build and optimize web applications.
 - Designed, implemented, and optimized **MongoDB databases** for efficient data storage and retrieval.
 - Created and implemented **RESTful APIs** using **Node.js and Express.js**, enabling seamless communication between frontend and backend systems.

Projects:

- Movie Recommendation System**
 - Analyzed** a Kaggle dataset to develop a personalized movie recommendation engine, utilizing **NumPy and Pandas** for advanced data preprocessing, resulting in a 40% increase in user engagement.
 - Built and optimized** machine learning models with **Scikit-learn**, implementing **collaborative and content-based filtering** for accurate recommendations.
 - Improved model scalability and performance through hyperparameter tuning, delivering enhanced prediction accuracy.
- Codebasic Q&A**
 - Developed an LLM-Based Q&A System:** Designed and implemented a Langchain-powered solution to automate student query handling for Codebasics.io, enhancing operational efficiency.
 - Applied NLP and Machine Learning Techniques:** Utilized Huggingface embeddings and FAISS for advanced natural language processing and optimized knowledge retrieval.
 - Built an Interactive Web Interface:** Created a Streamlit-based UI to deliver real-time answers, improving user engagement and system usability.
- AnimeFaceGAN**
 - Trained** a DCGAN model in **PyTorch** to generate anime-style faces using the **Anime Face Dataset**, utilizing **GPU** for efficient training.
 - Designed and trained** Generator and Discriminator networks, optimizing with **Adam optimizer** and **Binary Cross-Entropy Loss**.
 - Visualized** training progress through generated images, loss curves, and showcased outputs via a video presentation.

Skills:

- Data Structures and Algorithms (DSA)
- Object-Oriented Programming (OOPS)
- OPERATING SYSTEM
- Tool/platform:** Git, GitHub
- Solved 550+ questions on [LeetCode](#) and other platforms
- AI/ML:** NumPy, pandas, matplotlib, sklearn, PyTorch, CNN, ANN, deep learning, TensorFlow, NLP, GenAI, LLM, llama, langchain
- Programming Languages:** python, C++, JavaScript
- Web development:** HTML, CSS, Tailwind, React.JS, Node.JS
- Database:** MongoDB, SQL, DBMS
- Cloud:** AWS (SageMaker and S3 Bucket)

Certifications:

- Certified in Supervised Machine Learning: Regression and Classification by [Stanford University through Coursera](#).