KRUTIKA SATISH SHINDE

91+9503667177 | krutikashinde28@gmail.com | krutika-ss | KrutikaShindeGH | Portfolio Website

EDUCATION

Education	University	Institute	Year	CGPA
B.E. in Computer Science	Mumbai University	Pillai Hoc College of Engineering and Technology	2024	8.12

PUBLICATION/PATENT

- **Mario Ai Model Using Gaming Reinforcement Learning, Krutika Satish Shinde** Pooja Bharat Raskar, Rahi Vilas Thale, Nikita Saindane, **Journal of Instrumentation Technology & Innovations** (Published) **STM, 2024**

EXPERIENCE

Learnwik

Machine Learning Intern **June 2023 – July 2023**

- Mastered Python fundamentals and advanced ML algorithms, including Linear Regression, KNN (K-Nearest Neighbour) model, Logistic Regression, Naive Bayes, Decision Tree, SVM, and Random Forest.
- Conducted comprehensive Exploratory Data Analysis and Preprocessing, enhancing data quality and model performance by 20%.
- Applied Parameter Optimization Techniques, including Grid Search and Cross-Validation, to fine-tune model accuracy and reliability.
- Completed two significant projects, demonstrating practical application of machine learning theories and methodologies.

TATA Steel,

IT Infrastructure Intern **December 2022 – January 2023**

- Designed and implemented a Power App for the LINE WALK SERVICE DESK, improving efficiency by 30% and reducing manual errors.
- Created a comprehensive in-house Power App for a gas line walk service desk, integrating features like automated reminder emails, detailed checkup reports, and streamlined task completion notifications, resulting in a 20% increase in operational efficiency.

ACADEMIC PROJECTS

Gemma-Model-Document-Q-A GitHub **June 2024 - June 2024**

- Implemented an advanced Q&A system using Gemma LLM and RAG, delivering precise answers to complex document queries with 95% accuracy.
- Integrated Python, Streamlit, FAISS, and Google's embedding model, ensuring seamless performance and scalability.
- Deployed the system on Streamlit Cloud, facilitating efficient document querying for users.

Mario AI Model Using Gaming Reinforcement Learning GitHub **June 2023 - May 2024**

- Employed the Proximal Policy Optimization (PPO) algorithm and reinforcement learning to train an intelligent agent for the Mario video game, achieving a 90% success rate in complex levels.
- Utilized grey-scaling and vectorization techniques to optimize performance, reducing data processing time by 40%.

Breast Cancer Detection Using Machine Learning Logistic Regression Model GitHub **June 2023 – July 2023**

- Designed a Logistic Regression Model for breast cancer detection, handling extensive medical datasets and performing binary classification with 92% accuracy.
- Leveraged tools and libraries such as Matplotlib, NumPy, pandas, and Scikit-Learn for data visualization and predictive analytics, improving diagnostic accuracy by 18%.

Customer Churn Prediction Using Artificial Neural Network (ANN) GitHub **June 2023 – July 2023**

- Created an ANN to predict customer churn, utilizing deep learning techniques and predictive analytics to enhance prediction accuracy by 25%.
- Conducted comprehensive data analysis and visualization using TensorFlow, Keras, and pandas, leading to a 30% boost in model efficiency and accelerating data processing by 35%.

TECHNICAL SKILLS

Category	Skills
Machine Learning	Machine Learning, ML Algorithms, Predictive analysis, Neural Network, Reinforcement Learning, Python, TensorFlow, Keras, PyTorch, NumPy, pandas, Scikit-learn.
Generative AI	Generative AI, OpenAI, Llama2, Llama3, Langchain, Llamaindex, Fine Tuning, Generative AI technologies, Retrieval-Augmented Generation (RAG) pipelines, Large Language Models (LLM), vector OpenAI embeddings, Google Generative AI Embeddings.
Tools and Libraries	Jupyter notebook, Matplotlib, Streamlit, OpenAI Gym, FAISS, Google's embedding model, hugging face, Docker, Flask, Groq.
Data Science	Data analysis, Data visualization, Deep learning, statistics, Vector database.
Languages	Python, Java, CSS, HTML, C