

KAINA SHAIKH

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SKILLS

- C++ | Python | SQL | Git | Numpy | Matplotlib | Sklearn | Pandas | Tensorflow | Pytorch | OpenCV | Streamlit |
- Data Science | Artificial Intelligence | Machine Learning | Deep Learning | Quantum AI | PowerBI | Tableau |

EDUCATION

Bachelor of Engineering	Vidya Pratisthan's College of Engineering	Pune , India	2020-2024
• Artificial Intelligence and Data Science			CGPA : 9.4

EXPERIENCE

Defence Research and Development Organization (DRDO)

Research Intern-Applied AI and Machine Learning	Pune	07/2023 - 12/2023
• Led the team by working on the Defect Detection system using Deep Learning, improved the accuracy of the model to 98%. • Fine-tuned the YOLOv8 algorithm by implementing it by scratch and on grayscale images. • Compared with existing algorithms and increased accuracy in the new approach by 11%.		

Amazon

Machine Learning Apprenticeship	Remote	07/2022 - 08/2022
• Implementation of core Machine Learning concepts Reinforcement Learning, Recommendation Systems, Causal Inference, Probabilistic Graphical Models, Supervised Learning, Deep Learning, Dimensionality Reduction, Unsupervised Learning.		

Microsoft

Microsoft ENGAGE Intern	Remote	05/2022 - 07/2022
• Implemented Face Recognition App that works on various applications such as Smart Attendance System, Face Emotion recognition and Twitter-posts security feature. • Focused mainly on building applications using pre-existing face recognition API by Microsoft Cognitive Services. • Designed and developed android application integrating all the features using Microsoft Xamarin Forms.		

PROJECTS

- **Cyclone Intensity Estimation** : Developed Quantum Machine Learning Algorithm with accuracy of 93% showing quantum advantage over classical CNN model for cyclone estimation. Comparing accuracy of prediction with random forest classifier support vector classifiers. Deployed web app using Streamlit.
- **Superstore Sales Analysis** : Designed dashboard using PowerBI, identified important Key Factor Indicators (KPI's) for sales forecasting time series analysis of next 15 days, trend analysis wrt to location, profit by month and year.
- **Crop Recommendation System** : Analyzed correlation between features. Compared to multiple ML algorithms, Random Forest and Naive Bayes achieved 99% percent accuracy which is 15% more than other Machine Learning algorithms.
- **Chronic Disease Prediction** : Performed EDA, Implemented Graph Neural Network for classification and compared with existing ML algorithms like RF, DT, Gradient Boosting, SVM. GNN achieved accuracy of 98% similar to Gradient Boosting.

PUBLICATION

- Deep Learning based Defect Detection and Segmentation for High Energy Material Applications
- Benchmarking Traditional and Graph Neural Network Models for Node Classification in Literature Characters [↗](#)

ACHIEVEMENTS

- **Harvard WECODE Scholar** : Received Harvard Women Engineers Scholarship, Women in Technology Conference, Jan '23.
- **Google Women In Cloud Summit** : Host-participant member, Cloud Summit, Google's Women Techmakers Community.
- **HEMCE Conference** : Poster representation of my research work at HEMCE conference, organized by ISRO and DRDO.
- **Machine Learning Hackathon** : Successfully completed ML Hackathon by Leaps Analytica, Sept '21.
- **Python Programming IIT Kharagpur** : Among top 10% from India to be selected for Python Event-All Youth Symposium.
- **Qubit x Qubit by Microsoft** : Successfully completed the International Program for Quantum Machine Learning, Feb '23.