Adeer Khan

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Experience

Asset Integrity Engineer, Softoo Pvt. Ltd. (collaboration with Abyss Solutions)

Mar 2023 - Present

- Engaged in remote evaluations of offshore and maritime oil platforms using Lidar and Photogrammetry methodologies, aiming to pinpoint regions for enhancement.
- Collaborated with multidisciplinary groups encompassing project leads, engineers, and data analysts to
 orchestrate assessments of asset integrity and devise adept resolutions to intricate challenges.
- Employed computer vision methodologies to derive point clouds from LiDAR scans, concurrently implementing deep learning algorithms for the segmentation of assets, enabling corrosion analysis.

Apprenticeship, McKinsey & Company (Remote)

Nov 2022 - July 2023

- Developed expertise in strategic thinking, problem-solving, and decision-making through rigorous case studies and practical exercises.
- Applied advanced frameworks and methodologies to solve real-world business challenges, fostering innovation and driving organizational success.

Graphics Head, IEEE CUST Student Branch

Jan 2019 - Aug 2022

- Led a team of graphic designers to manage IEEE social media and other graphical works.
- Organized over 40 webinars and mega-events such as Al-Funoon Gala and ICSEC.

Projects and Publications

- Machine learning-based monitoring and modeling for Spatio-temporal urban growth of Islamabad. ©
- Self-Driving Car Traffic Sign Classification using Keras, deployed through IBM Watson Cloud.
- Deployed Pneumonia diagnosis through X-ray image analysis model on streamlit, contributing to accurate medical diagnoses and treatment strategies for respiratory conditions. ©
- Applied machine learning algorithms for classification using popular datasets (Breast Cancer, Wine, Iris) and diverse models to achieve precise instance categorization.
- OpenAI LLM based cloud deployed Podcast summarizer application on streamlit.
- A langchain based agent model that allows users to interact with their uploaded image on streamlit. Po
- Pavement distress identification and drainage assessment using LIDAR Point Cloud and satellite imagery.

Technical Skills

- GeoInformatics (GIS): GIS data monitoring (ArcGIS), Remote Sensing (QGIS), and PyQGIS plugin dev.
- Computer Vision/Photogrammetry: OpenCV, YOLO, scikit-image, Autodesk Recap and Metashape.
- Programming/Toolboxes: C++, Python, MATLAB, GIT, OpenFOAM, OpenSees, Docker.
- Machine Learning: Data cleaning and analysis, Numpy, Matplotlib, Pandas, Seaborn, Plotly & Cufflinks.
- Deep Learning: Neural Networks, TensorFlow, PyTorch, Keras.
- Presentation: Streamlit, Paraview, Microsoft Office, Adobe Illustrator and Photoshop.

Education

CAPITAL UNIVERSITY OF SCIENCE AND TECHNOLOGY (CUST)

Islamabad, Pakistan

B.Sc. Civil Engineering CGPA: 3.88/4.0 (Gold Medalist)

Sep 2018 - Jul 2022

Certifications & Courses

- Machine Learning Specialization from Stanford. ©
- Neural Networks and Deep Learning from Stanford. ©
- Introduction to Computer Vision and Image Processing from Coursera by IBM.
- Imagery, Automation, and Applications from Courera by UC, Davis.
- Introduction to Programming with MATLAB from Coursera by Vanderbilt University.