Muhammad Tayyab

GIS Analyst

@ haris.a.mannan@gmail.com   📞 +92-324-9941206   in LinkedIn   GitHub   ⊙ Pakistan

SUMMARY

A passionate GIS Analyst with experience in geospatial data analysis and visualization, focusing on transforming complex spatial information into actionable insights and intuitive map-based solutions.

EDUCATION

Bachelor of Geographical Information System
University of the Punjab

📅 01/2021 - 06/2025   ⊙ Lahore, Pakistan

EXPERIENCE

Junior Machine Learning Developer
Cointegration.ai

📅 01/2024 - Present   ⊙ Islamabad, Pakistan

- Developed various Machine Learning models using Artificial Intelligence by utilizing different technologies like Lang-Graph, Langchain, LangSmith.

PROJECTS

A Machine Learning Model
Python, Google Earth Engine, numpy

🔗 https://drive.google.com/drive/folders/1mccSUwvL9DRoHLEP0CiiKqybhka_rf2k?usp=sharing

We developed a Machine Learning by training our model on the previously available data to predict the wheat yield in the Sahiwal Division, with and error of 0.137 tonnes/hectare.

NDVI Time Series Smoothing
R, RStudio

🔗 https://webgisassignment.netlify.app/

Utilized RStudio software to perform Normalized Difference Vegetation Index (NDVI) smoothing for monitoring and assessing vegetation health and dynamics in Sheikhupura district.

Digitization of West-African Countries
GIS, ArcGIS, QGIS

🔗 https://drive.google.com/drive/folders/1H6issi4A8G4akwhV0mUrJUu69gO1lQVu?usp=sharing

Utilized ArcMap tools to digitize a proper map of West African Countries, creating an accurate digital map.

NDVI Time Series Smoothing
R, RStudio

Utilized RStudio software to perform Normalized Difference Vegetation Index (NDVI) smoothing for monitoring and assessing vegetation health and dynamics in Sheikhupura district.

Object Based Image Analysis for Punjab Region
Classification

Employed eCognition software to conduct Object-Based Image Analysis (OBIA) for interpreting satellite imagery of the Punjab Region.

Land Surface Temperature for Gujranwala and Hafizabad
ArcGIS, QGIS, Digital Mapping

Conducted atmospheric correction on Landsat Level 1 data for the Sheikhupura region using ArcMap.

SKILLS

HTML	CSS	JavaScript	React	Node.js	Git	ArcGIS	QGIS	Digital Mapping

Machine Learning	Python

CERTIFICATIONS

Cartography
ESRI

Spatial Data Science
ESRI

Going Places with Spatial Analysis
ESRI

Shade Equity
ESRI