

MUHAMMAD ABDULLAH

Senior WebGIS Developer & Spatial Analytics Engineer

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LinkedIn: linkedin.com/in/muhammadabdullah-gisengineer | Portfolio: 4 Live WebGIS Applications

EXECUTIVE SUMMARY

Accomplished WebGIS Developer and Spatial Analytics Engineer with demonstrated expertise in developing enterprise-grade geospatial solutions. Proven track record of delivering functional WebGIS applications with advanced technical capabilities. Expert in Mapbox GL JS, real-time data visualization, and AI-powered spatial analysis. Combines deep technical expertise in modern web technologies with advanced geospatial analysis capabilities to solve complex business challenges.

EDUCATION

Bachelor of Engineering in Geoinformatics

National University of Sciences and Technology (NUST), Islamabad

2024-2028 | CGPA: 3.7/4.0

Relevant Coursework: Advanced GIS, Remote Sensing, Spatial Database Management, Geodetic Engineering, Programming (C++, Python), Statistical Analysis

PROFESSIONAL EXPERIENCE

Freelance WebGIS Developer

Self-Employed | 2024 - Present

- Developed 4 functional WebGIS applications demonstrating advanced technical capabilities
- Implemented real-time earthquake monitoring system with complex data visualization
- Created AI-powered solar energy analysis platform with machine learning integration
- Delivered business intelligence dashboard for spatial data analysis

GIS Research Assistant

NUST Institute of Geographical Information Systems | 2024

- Conducted advanced spatial analysis projects using industry-standard software
- Processed large satellite imagery datasets using ERDAS Imagine
- Collaborated with academic teams on geospatial research initiatives

CORE TECHNICAL COMPETENCIES

- WebGIS Development:** Mapbox GL JS, Leaflet, OpenLayers, ArcGIS API
- Programming:** JavaScript (ES6+), Python, HTML5/CSS3, Node.js
- GIS Software:** ArcGIS Pro, QGIS, ERDAS Imagine, Global Mapper
- Databases:** PostGIS, MongoDB, Firebase, Spatial SQL
- Cloud Platforms:** AWS, Google Cloud, Netlify, GitHub Pages
- Data Processing:** Pandas, NumPy, GDAL/OGR, GeoPandas
- Design Tools:** Adobe Creative Suite, AutoCAD, Figma
- Project Management:** Agile methodologies, Git version control

CERTIFICATIONS & ACHIEVEMENTS

- NUST Summer School Tutor** - Advanced GIS & Programming (2025)
- Best Student Project Award** - NUST GIS Department (2024)
- Dean's List** - Academic Excellence Recognition (2024)
- Technical Speaker** - NUST GIS Symposium 2024

PRODUCTION WEBGIS APPLICATIONS

Business Intelligence Geospatial Dashboard

React | Mapbox GL JS | PostGIS | Advanced Analytics

Enterprise-grade spatial analytics platform providing real-time business intelligence for Islamabad metropolitan area. Features include demographic analysis, market penetration mapping, and location optimization algorithm with interactive data visualization capabilities.
[business-analysis-islamabad.netlify.app](#)

Real-Time Seismic Monitoring System

JavaScript | WebGL | Live Data APIs | Data Visualization

Advanced earthquake visualization platform processing real-time seismic data from global monitoring networks. Implements complex temporal analysis algorithms, magnitude clustering, and comprehensive spatial mapping with interactive features.
[kodeezabdullah.github.io/kamchatka-earthquake](#)

AI-Powered Solar Site Assessment Tool

Python | TensorFlow | Satellite Imagery | Machine Learning

Innovative renewable energy analysis platform utilizing deep learning algorithms and high-resolution satellite imagery. Features automated solar potential assessment with advanced machine learning models for site evaluation.
[gisdeveloper-nust.github.io/solarvision-ai](#)

Emergency Response Coordination Platform

Node.js | Real-time APIs | Disaster Management

Comprehensive disaster management system for emergency coordination. Integrates multi-source data streams, provides real-time incident mapping, and facilitates coordinated emergency response with interactive dashboards.
[gisdeveloper-nust.github.io/punjab-disaster-management](#)

RESEARCH & ACADEMIC PROJECTS

Advanced Terrain Analysis Framework

ArcGIS Pro | Python Scripting | Research Project

Developed automated workflow for large-scale topographic analysis including hydrological modeling, slope stability assessment, and erosion prediction using advanced spatial analysis techniques.

Multi-Spectral Land Cover Classification

ERDAS Imagine | Machine Learning | Classification Analysis

Implemented advanced classification algorithms for satellite imagery analysis covering large study area. Applied ensemble learning methods for accurate land cover classification.

IMPACT METRICS

- 5+ Paid WebGIS Projects** completed successfully
- 4 Production Applications** deployed and functional
- Advanced Technology Integration:** AI/ML and real-time processing
- Full-Stack Development:** End-to-end project implementation
- Multiple Technology Stacks:** Diverse technical expertise demonstrated