

# HAMMAS SHAHID

## Senior GIS & Spatial Intelligence Engineer

Full-Stack Architect | AI Systems Developer

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### PROFILE

Senior GIS & Spatial Intelligence Engineer specializing in enterprise-scale geospatial systems, operational intelligence platforms, AI integrations, and full-stack architecture. Proven record of leading the design and delivery of complete platforms — from custom GIS engines and data pipelines to APIs, analytics dashboards, infrastructure, and AI-driven workflows — across mining, logistics, transportation, taxation, ERP, conversational AI, and business automation domains for clients in Australia, the UAE, the US, and beyond.

### CORE COMPETENCIES

- GIS & Spatial Intelligence Systems
- Enterprise Mapping Applications
- Spatial Analytics & Raster/Vector Data
- Full-Stack Architecture & System Design
- Real-Time Operational Intelligence
- Transport Management & Telematics
- Sensor Data Processing
- ERP & Enterprise Workflow Platforms
- AI & Machine Learning Integration
- NLP & Conversational AI
- BI Dashboards & Data Visualization
- Cloud-Native Web Applications

### PROFESSIONAL EXPERIENCE

#### Senior GIS & Enterprise Systems Consultant

08/2025 – Present

##### Independent Consultant

Lahore, Pakistan

- Independent consultant delivering geospatial systems, operational intelligence platforms, and enterprise full-stack architecture for international clients.
- **MapMyMine:** Lead technical consultant for a mining rehabilitation and operational intelligence platform for an Australian client — sole backend engineer (NestJS) and Angular frontend lead.
- Designed specialized GIS tooling beyond standard framework capabilities using OpenLayers, custom spatial analysis, and geospatial workflow engineering.
- Built rehabilitation planning workflows, operational dashboards, reporting systems, scheduling modules, and AI-assisted semantic matching.
- Lead solution design, technical architecture, and end-to-end delivery for GIS, AI integration, and real-time operational platforms.

#### Lead Full-Stack Engineer

09/2024 – 08/2025

##### OneClout

Lahore, Pakistan

- **Truckast:** Sole frontend engineer for concrete-industry TMS integrating Angular with Mapbox GL for real-time fleet monitoring and geospatial route intelligence.
- Built ML-assisted sensor analytics workflows for automated concrete delivery and pouring-activity detection with automated billing generation.
- Delivered cross-platform Flutter apps for field workers with real-time GPS tracking and telematics integration.
- Enhanced enterprise stakeholder management platform with advanced data visualization and performance optimizations.

#### Full-Stack Architect

05/2024 – 09/2024

##### Innovinci Tech

Lahore, Pakistan

- Led architecture and development of a custom CRM for Bitcoin ATM deployment in the US market.
- Designed secure backend systems using NestJS, PostgreSQL, and TypeORM with role-based access control.
- Built Angular frontend with Firebase Authentication and real-time notifications via Firestore.

## Lead Full-Stack Engineer

12/2021 – 04/2024

### Coders Base Solutions

Lahore, Pakistan

- Architected and deployed a SaaS-based Transportation Management System (TMS) for logistics operations.
- Integrated real-time truck tracking APIs, telematics, and live fleet monitoring dashboards.
- Designed scalable NestJS backend services with PostgreSQL and microservices architecture; built responsive Angular frontend with geospatial route intelligence.
- Delivered shipment tracking dashboards, admin features, and automated operational workflows.

## SELECTED CONTRACT ENGAGEMENTS

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### Kollaber.AI — Lead Backend Developer & Architect

Architected AI-powered productivity platform with OpenAI integration, NLP-driven workflows, multi-tenant organization management, and real-time conversational interfaces. **Tech:** NestJS, PostgreSQL, OpenAI API.

### MyTaxDesk — Lead Backend Developer & Architect

Enterprise CRM for UAE tax consultancy with compliance operations, real-time client engagement, case tracking, and workflow automation. **Tech:** NestJS, PostgreSQL.

### EMSS — Backend Developer

Backend architecture for TMS and CRM serving logistics clients in the UAE with real-time operational tracking. **Tech:** NestJS, MySQL.

### Adaa Employment LLC — Backend Developer

Comprehensive workforce management platform with complete employee lifecycle management — hiring, onboarding, performance tracking, and offboarding — including full payroll processing, gratuity calculations, and role-based access control. **Tech:** NestJS, PostgreSQL.

### Mathematical Tools — Full-Stack Developer

Angular-based computational tools for a renowned mathematician to run advanced logic-based computations for publication-grade proofs.

## TECHNOLOGY STACK

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<b>GIS &amp; Spatial</b>	OpenLayers, Mapbox GL, PostGIS, Spatial Analytics, Raster & Vector Processing, Geospatial Data Engineering, GPS & Telematics
<b>AI &amp; ML</b>	OpenAI Integrations, NLP Systems, Semantic Matching, ML-Assisted Workflows, Conversational AI, Intelligent Data Extraction
<b>Frontend</b>	Angular, React, React Native, Flutter, TypeScript, JavaScript, Highcharts, Chart.js, AG Grid
<b>Backend</b>	NestJS, Node.js, REST APIs, WebSockets, Microservices, TypeORM, Prisma, GraphQL
<b>Data &amp; Analytics</b>	PostgreSQL, PostGIS, MySQL, MongoDB, Redis, Advanced Reporting, Business Intelligence Dashboards
<b>Infrastructure</b>	Linux, Docker, Nginx, AWS (S3, EC2, Lambda), Cloud Deployments, CI/CD, Firebase