

EKRAM ALVI

Operations & Data Systems Architect | AI-Enhanced Automation | Python, SQL, Azure, AWS

SUMMARY

Systems architect who builds full-stack operational platforms from the ground up — replacing fragmented processes with unified, AI-enhanced automation. Proven across healthcare CRMs, registration pipelines, financial systems, and analytics dashboards. Deep roots in Muslim community organizations. Manages contractors, coordinates vendors, and delivers scalable infrastructure at minimal cost.

EXPERIENCE

Data & Systems Analyst — Mosaic Healthcare LLC

Nov 2025 – Present • Richardson, TX

- Architected custom HIPAA-compliant CRM on Azure (Static Web Apps, Functions, Node.js, SharePoint Graph API), replacing 3 fragmented systems — managing 400+ patients, 600+ episodes, 3,000+ interactions across 20+ facilities for 7 staff users.
- Built AI assistant using Gemini API trained on SOPs for instant procedural Q&A without PHI exposure. Total platform cost: ~\$1/month.
- Delivered 10 analytics dashboards and 6 KPI cards tracking readmissions, staff workload, and engagement — enabling data-driven care coordination for the first time. Created facility reports and hospital pitch decks.
- Building in parallel: HR automation (Gusto + Power Automate), ZIP code service area mapping (Power Apps), and supply ordering/inventory management application.

Independent Consultant — Self-Employed

Sep 2023 – Present • Dallas, TX

- QA Ventures (retail, 2 stores): Built entire business operations — POS (RepairDesk), financial ledger with P&L, payroll, tax prep, franchise reporting, state tax filing. Managed physical store buildout including painting, signage, and vendor coordination.
- Ihya Foundation (nonprofit): Google Nonprofit setup, student management system, financial tracking, full marketing suite (flyers, brochures, banners), Ramadan fundraising campaign across masjids.
- Seekers Institute: Operational infrastructure from zero — Airtable, WeTravel, WordPress, financial systems. Filing for nonprofit. Also managing Dallas rental properties for housing voucher compliance.

Research Data Scientist — Howard University

Sep 2024 – Present • Remote

- Leading analysis of Muslim youth study (800 respondents, 400 items). Built Dash dashboard on Snowflake/AWS. K-means cluster analysis on religious struggle dimensions approaching paper publication.

National Data Coordinator & Regional Director — MIST

Aug 2021 – Present

- Migrated decade of tournament data (15+ regions) from maxed-out Google Sheets to PostgreSQL on AWS RDS. Built live Streamlit dashboard replacing manual annual reports with self-service analytics.
- Led 33-person team for 2-weekend tournaments: 600+ competitors, coaches, judges, volunteers. All logistics from room assignments to scoring systems.

Vice Lead & Competitions Chair — MSA Lone Star Council

Aug 2023 – May 2024

- Revamped MSA Showdown (1,600+ attendees, 50+ teams): JotForm pipeline, Python-generated reports, QR badge system, standardized judging rubrics. Budget, sponsorships, 100+ vendor Grand Bazaar, university coordination.

LEADERSHIP & COMMUNITY

- MSA Unity** — Dir. of Business Development — 40+ MSAs onboarded nationally (2023–2025)
- One For All** — Founder & Advisor — 2 active chapters (UTD, Duke) (2022–Present)
- IMBA** — Co-Founder — 4 divisions, 32+ teams, custom jersey design (2022–Present)
- ICY** — Board Member — youth programming at ICI mosque (2022–2025)

EDUCATION

M.S. Applied Cognition & Neuroscience — Computational Modeling

B.S. Neuroscience — Pre-Medical Track

The University of Texas at Dallas • 2020 – 2025

CONTACT

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U.S. Citizen

LANGUAGES

Python, SQL, JavaScript (Node.js), R, HTML/CSS (Tailwind)

Libraries: Pandas, NumPy, Scikit-learn, TensorFlow, Matplotlib, Plotly

CLOUD & INFRASTRUCTURE

Azure: Static Web Apps, Functions, MSAL Authentication

AWS: RDS (PostgreSQL hosting)

SharePoint Online, Microsoft Graph API, GitHub Actions CI/CD

AI & AUTOMATION

Gemini API, OpenAI, Claude, Microsoft Copilot

Power Automate, Zapier, Make

Custom AI assistant development (SOP-trained chatbots)

DATABASES & ANALYTICS

PostgreSQL, MongoDB, MySQL, Snowflake

Power BI, Tableau, Streamlit, Dash

SPSS, Excel/Power Query

OPERATIONS & TOOLS

CRM Development, HIPAA Compliance, SOP Documentation

Airtable, ClickUp, JotForm, Gusto

WordPress, Canva, Google Workspace, RepairDesk POS

PATENTS

Mental State Determination

U.S. Patent No. 11751783

ML model for mental health risk prediction using biomarker data

AquaScrimp Smart Shower

U.S. Patent No. 11933029

IoT water conservation device. NASA Spirit of Innovation semi-finalist.

CERTIFICATIONS

IBM Data Science Professional

7-course certification: Python, ML, Data Analysis, Visualization, Methodology

Google PM Foundations

Visionaries Leadership Academy

PROJECTS

TensorFlow Object Detection

ML model to identify and classify construction site components (plumbing, windows, pipes, HVAC).

SpaceX Data Science Capstone

Analyzed launch data using ML to predict outcomes and improve operational strategies.