

# Prakash Madai | Portfolio: <https://prakashmadai10.github.io/Prakash-Portfolio/>

Texas, USA – Open to Relocation Nationwide | [prakash.madai17@gmail.com](mailto:prakash.madai17@gmail.com) | [linkedin.com/in/prakashmadai10](https://www.linkedin.com/in/prakashmadai10)

## EDUCATION

**Masters Computer Science** | [University of Texas Permian Basin \(UTPB\)](#) | Odessa, TX | GPA: 3.9/4 | May, 2024

**Bachelors in Computer Engineering** | Tribhuvan University | Kathmandu, Nepal | 2014-2018

## WORK EXPERIENCE

**GIS Analyst / Administrator & Data Analyst** | [City of Midland, Texas](#) | 07/2025 – 01/2026

- Deployed and administered a full ArcGIS Enterprise test environment (Portal, Server, Data Store, Web Adaptor), managing SDE geodatabases, federation, performance tuning, and backup/recovery of ArcGIS Online feature layers to sharepoint storage
- Configured ArcGIS Hub distributed collaboration between ArcGIS Enterprise and AGOL, automating synchronization for 600+ hosted layers
- Developed Python automation to bulk-update metadata, permissions, and audit logs, reducing manual configuration effort by ~90% and supporting daily compliance reporting for 500+ items
- Built and optimized SSIS ETL workflows and ModelBuilder processes to refresh GIS datasets nightly and publish automated web maps and dashboards for City Council and departments (traffic, zoning, permits, inspections, seeclickfix).
- Supported Fire Department operations by migrating hydrant data and configuring ArcGIS Field Maps for routine fire hydrant inspections
- Developed an ArcGIS Dashboard integrating Code Enforcement and EnerGov data to address geocoding inconsistencies and delayed updates, improving operational visibility and service responsiveness
- Supported the Business Intelligence (BI) team by extracting, validating, and delivering KPI datasets from public safety systems, including RMS and CAD databases, to support police performance reporting, operational dashboards for decision making

**GIS Analyst / Administrator** | [City of Odessa, Texas](#) | 03/2024 – 06/2025

- Administered ArcGIS Online, ArcGIS Server, and SQL Server spatial databases using Python, SQL, and Arcade, managing 1,000+ layers and supporting 300+ city users with automated backups to SharePoint
- Led spatial analysis for the Lead and Copper Rule Revision (LCRR), analyzing 48,000+ utility records and producing compliance web maps for Water Utilities
- Designed and deployed public-facing and internal GIS applications, including Fire Hydrant Locator and Tree Management apps, improving asset visibility across parks and neighborhoods
- Implemented ArcGIS Solutions for solid waste, sign, and signal management, enabling mobile data collection, inspections, auditing, and dashboard reporting for field crews

**Data Engineer-Internship** | [Rocket Mortgage](#) | Detroit, Michigan | 05/2023- 8/2023

- Developed AWS Glue ETL scripts using Python and PySpark to manage property datasets across S3, Athena, and MS SQL Server, ensuring data consistency
- Designed interactive Power BI dashboards with bake time analysis and Market Visibility Model, providing live insights across 50 states and improving decision making efficiency
- Implemented Apache HUDI for incremental data processing, optimizing storage utilization and achieving a cost reduction in Loan Prioritization scripts

**Data Analyst** | [Virtuosway Software Pvt Ltd](#) | Kathmandu, Nepal | 10/2021 – 07/2022

- Directed the “Datasphere” project for Omnicom Media Group, creating a data pipeline with AWS S3, Lambda, and Glue to process huge weekly data, increasing processing speed by 40%
- Delivered 10+ Power BI dashboards for the “AppyHere” HR platform, transforming recruitment processes with actionable insights that enhanced hiring decisions

**Data Analyst & Technical Support** | [Nepal Clearing House Ltd](#) | Nepal | 01/2020 –09/2021

- Engineered executive reports and 35+ interactive dashboards, analyzing over 100,000 records weekly to uncover trends and deliver timely insights through an ETL pipeline and OLTP/OLAP systems
- Automated 1,000+ monthly CSV file deliveries to banks and financial institutions, integrating osTicket with ECC cheque archives, reducing manual effort by 80% and improving workflows
- Supported daily operations for NCHL’s payment systems, managing transactions across connectIPS, NCHL-IPS, CORPORATEPAY, and other platforms, ensuring maximum uptime
- Conducted system testing, integration, and database monitoring, enhancing transaction reliability and supporting new feature deployments

## SKILLS

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**Programming Languages:** Python, R

**Enterprise GIS & Platforms:** ArcGIS Enterprise, ArcGIS Server, Portal for ArcGIS, ArcGIS Data Store, ArcGIS Web Adaptor (IIS), Enterprise Geodatabase (SDE) Administration, ArcGIS Pro, QGIS, CityWorks

**GIS Automation, Development & Data Management:** Python for GIS (ArcPy, ArcGIS API for Python), ModelBuilder, Arcade, Geoprocessing Tools, Spatial & Non-Spatial ETL Pipelines, Geodatabase Design & Management, Spatial Data Analysis

**Web GIS, Applications & Visualization:** ArcGIS Online, ArcGIS Dashboards, ArcGIS Solutions, Experience Builder, Hub (Open Data), StoryMaps

**Mobile GIS, Field Operations & Data Collection:** ArcGIS Field Maps, Survey123, Workforce, GPS-Based Data Collection, Georeferencing, Address Geocoding

**Databases:** Microsoft SQL Server, Oracle, PostgreSQL, NoSQL (MongoDB)

**Data Engineering:** Apache Spark, Airflow, SSIS, SSRS, Data Analytics (Pandas, Microsoft Excel), Data Visualization (Power BI, Matplotlib, Seaborn)

**Other Skills/Tools:** Database Design, Data Modeling, AWS, Financial Services and Technology, API, Linux, Artificial Intelligence, Machine Learning, Power Automate, HTML, CSS, Data Governance, QA/QC, Microsoft Fabric

## CERTIFICATIONS

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- [ArcGIS Pro Foundation 2025 | ESRI | Nov 2025](#)
- [CompTIA Data+ v2 \(DA0-002\) | CompTIA | Dec 2025](#)
- [Fabric Analytics Engineer Associate | Microsoft | Dec 2025](#)
- [Lean Six Sigma Green Belt Certification | Council for Six Sigma | Dec 2025](#)
- [Configuring Utility Networks in ArcGIS – Instructor Led Course | Esri | Oct 2024](#)
- [ArcGIS Enterprise: Creating Python Scripts for ArcGIS | Esri | August 2024](#)
- [ArcGIS Enterprise: Administration Workflows | July 2024 | Esri](#)
- [ArcGIS Enterprise: Configuring a Base Deployment | May 2024 | Esri](#)