

# PARSHANT

## SUMMARY

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Full-stack GIS and web engineer with 2.5+ years of experience delivering 2 production-grade platforms and 20+ automation tools across enterprise environments. Specialized in building geospatial decision systems, cloud-native architectures, and scalable data pipelines, transforming complex spatial datasets into actionable business insights for energy and infrastructure domains.

## EXPERIENCE

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### **Ramboll, Gurgaon, Haryana - IN | Assistant Digital Product Engineer - III**

**Oct, 2025 – Present**

- Led full-stack development of a renewable energy investment decision platform, integrating GIS-based site suitability, infrastructure routing, and financial models (NPV, LCOE, CAPEX/OPEX) into a unified web application — enabling data-driven screening and reporting for wind and solar projects.
- Contributing to a district energy economic platform, building modules for spatial analysis, thermal network aggregation, and infrastructure cost modeling — supporting investment-grade feasibility assessments.
- Architected and deployed scalable applications using React, FastAPI, PostgreSQL/PostGIS, and Azure, ensuring high performance and production reliability.
- Built and optimized geospatial data pipelines, including migration from ArcGIS/ArcPy (GDB) to open-source stacks (GeoPandas, GPKG), significantly improving processing efficiency and interoperability.
- Integrated ArcGIS (Pro, Online, Enterprise) with backend APIs and dashboards, enabling seamless data flow and enhanced decision-making workflows.

### **MapMyIndia, Okhla New Delhi | Software Engineer-III**

**Nov, 2023 – Sept, 2025**

- Led the development of a centralized GIS environment, transitioning from proprietary software to open-source solutions for the production and testing teams. This transformation enabled seamless collaboration by integrating QGIS with a PostgreSQL database, ensuring end-to-end logging and user-level security. Designed and implemented a custom QGIS plugin that connects and manages GIS layers, automating workflows and enhancing operational efficiency. Additionally, developed a comprehensive activity dashboard using FastAPI along with core HTML, CSS, and JavaScript, providing real-time insights into user actions, system logs, and security events. Served as the primary developer for the entire QGIS integration, including layer connectivity, logging mechanisms, and security protocols, ensuring a robust and scalable system for production and testing teams.
- Developed an offline messaging and hosting service using MQTT, enabling reliable communication between application users in disconnected environments.
- Led the integration and deployment of MapStore, QGIS Server, and PostgreSQL/PostGIS to enhance GIS visualization and spatial data management. As the core developer, I implemented optimizations that improved rendering speed, security, and backend support for handling large-scale geospatial data, ensuring optimal performance and usability.
- Engineered Windows and Linux software applications, notably a cutting-edge Geographic Information System (GIS) app, optimizing data and map generation processes; increased speed and accuracy through advanced algorithms, UI enhancements, and efficient data structures and algorithms (DSA).

- Migrated and developed centralized systems, including a unified QGIS plugin repository, offline-hosted PyPI server, and consolidated software repository, streamlining operations and enhancing collaboration with centralized documentation. Implemented Docker for containerized deployments, optimized CI/CD pipelines using GitLab, and leveraged Sphinx to create and maintain structured developer and user documentation, ensuring seamless integration and project management.

### **MapMyIndia, Okhla New Delhi | Intern**

**Aug, 2022 – Oct, 2022**

- Developed QGIS plugins for data filtering and updating, enhancing the functionality of the platform. This experience allowed me to apply my skills in a professional setting, contributing to the company's goal of improving data management processes within QGIS.

## **SKILLS**

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Languages: Python, JavaScript, HTML, CSS, SQL

Databases: PostgreSQL + PostGIS, MySQL, SQLite3.

Frameworks/Libraries: Django, FastAPI, React, Bootstrap, GeoPandas, Arcpy, pyqgis, Leaflet, Pandas, Numpy,

Tools/Technologies: AWS, Azure, Docker, Git, CI/CD, Sphinx, ArcGIS, QGIS

Data Structures & Algorithms (DSA)

Operating Systems: Windows, Linux.

## **ACHIEVEMENTS**

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Led the Tech and Python initiatives at GirlsScript for a year, organizing virtual classes for Python programming and Hacktoberfest to facilitate student learning. Additionally, completed the 30-day Google Cloud Program with certification.

## **EDUCATION**

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M.Tech (CSE, Distance, Pursuing) from Maharshi Dayanand University, Rohtak | 2025–2027


B.Tech in Computer Science Engineering from UIET, KUK, in 2019-2023 with a CGPA of 7.26.

XII (HBSE) from Nobel Dev Public School.

X (HBSE) from Govt. Sr. Sec. School.

## **CONTACT**

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