
Sayan Roy

Bengaluru, India

mailto:sayanroy@gmail.com

+91-8240262790

Summary

Senior Database Engineer and Technical Project Lead with 6 years of professional experience designing, building, and maintaining enterprise-grade relational database systems. Expertise in developing backend applications with **PostgreSQL** and **MongoDB**. Currently serving as a SPOC for advanced **PL/pgSQL** programming, and troubleshooting technical issues related to RDBMS, NoSQL databases, and distributed computing environments. Equally skilled in **Node.js**, **Express.js**, and **MySQL**, with hands-on experience in database provisioning, schema design, query optimization, and ETL processes. Adept at advocating for customer needs and implementing scalable solutions for efficient database and application performance, with an emphasis on clean code.

- Outstanding home health aide with [x] years of experience providing excellent care for patients while helping them maintain a positive lifestyle

Skills

- **Database Technologies:** PostgreSQL, MongoDB, MySQL
- **Cloud Technologies:** GCP*
- **Programming & Automation:** PL/pgSQL, JavaScript, Shell scripting, Pentaho, Apache Hop, CRON
- **DevOps & CI/CD:** GitLab CI/CD, OpenProject, Docker*
- **Web Development:** Node.js, Express.js, RESTful APIs
- **Server Management:** Nginx, Tomcat, Linux
- **Project Management:** Agile methodologies, sprint planning, stakeholder communication

* - Currently upskilling

Experience

Mu Sigma Inc.

Apprentice Leader • Bengaluru, Karnataka

12/2022 - Present

- Organize daily Scrum meetings with teams and weekly business reviews with stakeholders to ensure project alignment.
- Oversee the productivity and effectiveness of a 10-member development team, assigning tasks, setting deadlines, and monitoring progress.
- Designed multiple data marts from a financial data warehouse to support the Business Rule Engine of an SoW and Invoice app. The query performance was boosted by a factor of 75%, bringing down ETL pipeline execution time by 40%.
- Migrated 500GB+ of legacy HRIS data from MSSQL to a combined solution of Postgres DW for structured data and MongoDB DMS for blobs.
- Architected database solutions based on business needs, keeping enough room to support future growth while minimizing downtime and maintenance.
- Developed ETL pipelines for seamless data synchronization across platforms and third-party hosts, ensuring real-time data availability. Implemented triggers for data manipulation and refreshing materialized views.
- Optimized complex SQL queries and stored procedures through indexing strategies, and data partitioning techniques, enhancing user experience and operational efficiency.
- Addressed security vulnerabilities and took part in security audits, reducing data breach risk by up to 50%.

Mu Sigma Inc.

- Addressed challenges related to database and ensured scalable solutions without the need for future intervention.
- Implemented database replication and clustering strategies to ensure high availability up to 99.5%.
- Ensured data consistency by applying best practices related to normalization and constraints.
- Streamlined reporting and analytics processes using advanced SQL techniques and automated pipelines.
- Developed RESTful APIs for seamless backend integration across multiple modules.
- Configured Nginx and Tomcat servers for application deployment in Linux environments.
- Administered version and release control via GitLab, ensuring structured code management.

Nielsen India Pvt. Ltd.

Consultant • Kolkata, West Bengal

04/2019 - 10/2019

- Conducted detailed data analyses for government programs, delivering actionable insights to drive improvements.
- Automated data processing workflows using **Excel VBA**, reducing manual intervention and errors.
- Prepared comprehensive assessment reports with data visualizations for stakeholder decision-making.

Education

St. Xavier's College (Autonomous)

M.Sc. in Computer Science • Kolkata, West Bengal

06/2019

- Graduated with 7.18 CGPA (First Class)
- Served as the Chief Website Developer of eXabyte'19 - The annual tech fest of the Dept. of Computer Science.

Vidyasagar College (Calcutta University)

B.Sc. in Computer Science • Kolkata, West Bengal

06/2017

- Graduated with Honors (First Class)
- Served as the Editor of ENCODE'17 - The annual digital magazine of the Dept. of Computer Science

Languages

English, Bengali, Hindi

Certifications & Awards

- SQL(Advanced) Certification by HackerRank
- Earned 2x SPOT Award and 1x IMPACT Award at Mu Sigma for leadership and development excellence.
- Finalist in Nielsen Store Transaction Imputation Hackathon (TechGig)
- Winner of coding competitions (XHunt, CyberTrek) at St. Xavier's College, Kolkata.