

Darshan Nilesh Mahajan

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Associate

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i4mdarshan.github.io/portfolio/

PROFESSIONAL SUMMARY

Software engineer devoted to customers and ownership-driven with, **3 years of experience** taking complex large-scale systems from design to deployment. Proven ability to deliver results by building and optimizing scalable backend services, data pipelines, and REST APIs in fast-paced, agile environments. Expertise in Java, Python, C++, SQL, and AWS.

EDUCATION

University of Southern California

Masters of Science, Applied Data Science (GPA 3.5)

August 2025 – May 2027

Los Angeles, California

- **Relevant Coursework:** Software Engineering, Distributed Systems, Applied Machine Learning, Knowledge Graphs

University of Mumbai

Bachelors of Science, Electronics & Telecommunications Engineering (GPA 3.6)

August 2018 – June 2022

Mumbai, India

- **Relevant Coursework:** Operating Systems, Database Management Systems, Data Structures, Algorithms, Web Development

SKILLS

Programming Languages: Java, C++, Python, PHP, JavaScript, jQuery, TypeScript

Frameworks/Libraries: ReactJS, SpringBoot, Laravel, Flask, D3JS

Databases: MySQL, MongoDB, Firebase, Hadoop (HDFS, MapReduce)

Cloud & DevOps: Git, AWS (EC2, S3, Lambda, Glue, IAM), GCP, Docker, Jenkins, CI/CD

EXPERIENCE

Accenture

Software Engineer

November 2022 – August 2025

Mumbai, India

- Engineered and optimized large-scale **backend REST microservices** and SQL data pipelines processing €10M+ in monthly revenue; applied advanced query optimization and pre-aggregation techniques to reduce report generation time by 40%, directly improving performance for 13 global business units.
- **Designed** and **developed** a secure, high-availability API component to manage and integrate data flows between distributed enterprise systems (Salesforce, Oracle), ensuring 100% data integrity and compliance for the core billing data platform.
- Contributed to **performance engineering** by optimizing large-scale SQL data pipelines, reducing **query processing time** by 40% through advanced query optimization and pre-aggregation.
- Engineered highly-available Distributed Systems by implementing **master-slave database replication** within **Docker containers**, achieving 99.9% data consistency for the core billing platform.
- Streamlined production Debugging and deployment processes by **building Jenkins** pipelines with Docker support, automating build/deploy cycles and reducing deployment failure rates by 60%.
- Developed **Automation/Scripting tools** (Bash/Shell) to manage legacy system configurations and automatically generate sanitized test datasets, reducing environment setup time by 4 hours per UAT cycle.

DotMinds

April 2020 to April 2022

Full – Stack Developer Intern

Mumbai, India

- **Applied** solid database fundamentals to design performance-optimized and normalized MySQL schemas for 5+ client applications; **implemented** relational constraints, indexing strategies, and query optimizations to ensure high data integrity.
- **Designed** and **built** the backend REST APIs and database architecture for a billing automation system (PHP, MySQL) to manage 5,000+ members, successfully automating invoicing and room allocation for over 850 families.

PROJECTS

LiveChat WebSocket Engine

[Java, SpringBoot, TypeScript, MySQL]

- Developed a real-time communication application utilizing SpringBoot and STOMP WebSockets for bi-directional event streams. Built scalable REST APIs to handle message persistence and authentication. Developed type-safe with synchronized application state for instant delivery, presence detection, and live typing indicators.

LensLoop - modern social media inspired web application

[ReactJS, Redux Toolkit, TypeScript, AppWrite]

- Engineered the entire user interface using TypeScript and ReactJS, leveraging TanStack Query for automatic caching, efficient parallel data fetching, and robust real-time server mutations.

Customer Relationship Management (CRM)

[PHP, Laravel, JavaScript, MySQL]

- Enhanced marketing personalization for a 50K+ customer base by developing a CRM (Laravel, MySQL) with an integrated recommendation engine (collaborative filtering) and a K-Means clustering module, which enabled targeted product suggestions and proactive risk identification.

High-Performance Feature Processing Service

[C++, Docker]

- Achieved consistent sub-10ms latency for a high-volume feature-serving application by developing a C++ backend service and implementing an optimized RESTful API (C++ Rest SDK) to efficiently compute and serve complex user features.

FrameQL - custom data manipulation library

[Python, Flask]

- Built a custom Python DataFrame library using generators and chunked CSV parsing for memory-efficient, streaming data processing. Implemented a multi-stage query pipeline (filter, join, aggregate) with hash-based joins and grouping logic, enabling GB-scale data analysis without full in-memory loading.