DARSHAN NILESH MAHAJAN

Certified AWS Solutions Architect Associate | Los Angeles, CA| linkedin.com/darshan-mahajan

WORK EXPERIENCE

ACCENTURE, Software Engineer

Nov 2022 - Aug 2025

- Interfaced directly with client stakeholders to define, gather, and refine complex feature requirements for core backend billing microservices, resulting in highly-available solutions that reduced production bugs by 25%.
- Led a database migration from MySQL 5 to 8 and optimized schemas, directly resulting in a 40% reduction in average
 query execution time.
- Supported the **modernization of a legacy application to a Docker environment**, automating deployments via **Jenkins** and cutting release times **from hours to under 15 minutes**.
- Enhanced **system observability by building a centralized logging layer**, which decreased the Mean Time to Resolution **(MTTR)** for production incidents **by over 60%**.
- Collaborated with **DevOps to set up robust CI/CD pipelines** across staging and production environments.
- Implemented an automated data replication pipeline to generate sanitized test datasets from production to lower environments.

DOTMINDS, Full Stack Developer Intern

Apr 2020 - Apr 2022

- Contributed to the development of multiple client-facing web applications using ReactJS, and Laravel, MySQL backend with a primary focus on backend architecture and REST API development.
- Designed **normalized and performance-optimized MySQL schemas** for 5+ client use cases. Implemented relational constraints, indexing strategies, and query optimizations to ensure data integrity and system efficiency.
- Built and maintained a billing and automation system for an NGO managing 5,000+ members. Automated room allocation and monthly invoicing for 850+ families, significantly reducing manual administrative overhead.

EDUCATION

University of Southern California, Thomas Lord Department of Computer Science

Master of Science, Computer Science (Applied Data Science)

Aug 2025 - May 2027

• Relevant Coursework: Algorithms, Software Engineering, Distributed Systems, Applied Machine Learning.

University of Mumbai

Bachelor of Technology, Electronics & Telecommunication Engg. (GPA: 3.7)

Aug 2018 - Jun 2022

• Relevant Coursework: Database Systems, Operating Systems, Digital System Design, Artificial Intelligence.

TECHNICAL SKILLS

- Programming Languages: Java, CPP, Python, PHP, JavaScript, TypeScript.
- Frameworks/Libraries: ReactJS, Redux Toolkit, Laravel, SpringBoot, TensorFlow, Scikit-learn.
- Databases: MySQL, Firebase, MongoDB, Hadoop (HDFS, MapReduce, YARN).
- Cloud & DevOps: AWS (EC2, S3, Lambda, IAM), GCP, Docker, Jenkins.

PROJECTS

High-Performance Feature Processing Service - [C++, Docker]

- Developed a C++ backend service to efficiently compute and serve complex user features for a simulated application.
- Implemented a **RESTful API interface** using a C++ framework (e.g., C++ Rest SDK) to handle high-volume feature requests with **sub-10ms latency**.

Customer Relationship Management (CRM) - [Laravel, Javascript, MySQL] - Link

• Developed a **CRM system** for 50K+ customers, implementing a **recommendation engine with collaborative filtering** and a **customer segmentation module** using K-Means clustering. These features drove personalized product suggestions, enhanced marketing targeting, and enabled proactive risk identification.

LensLoop - [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.

Repeat Buyer Prediction for E-Commerce Promotions - [Scikit-learn, TensorFlow, Pandas, and NumPy]

- Engineered **predictive models** using **XGBoost and Logistic Regression** to estimate 6-month repeat purchase probability for over 40,000 new buyers post "Double 11" sale.
- Implemented advanced feature extraction from 6 months of user logs (clicks, add-to-cart, purchases) to increase validation AUC by 10% through behavioral sequences and demographics.