

Mahesh Deshmukh

JAVASCRIPT FULL-STACK DEVELOPER

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SUMMARY

Full-stack engineer with 7+ years of experience building scalable, high-performance web applications in the insurance domain. Proven expertise in React, Node.js, and AWS, with a strong focus on system design, performance optimization, and multi-tenant architectures. Experienced in leading teams and delivering business-critical solutions.

TECHNICAL SKILLS

Languages – JavaScript (ES6+), TypeScript, Python

Frontend – ReactJS, Next.js, React-Redux, Redux Toolkit, Redux-Saga, Zustand, React Query, Styled Components

Backend – Node.js, Express.js, tRPC, Fastify, GraphQL

Databases – MySQL, Drizzle ORM

Cloud & Architecture – AWS (Lambda, S3, API Gateway, SQS, SES, ECS, IAM, CloudFront), Serverless Architecture, Multi-tenant Systems, Event-driven Architecture

Testing – Jest, Cypress, Playwright

Tools – Git, GitHub Actions, OpenReplay, Biome, Jira

Specialized – OCR using GPT-based models, Multi-tenant SaaS architecture, Monolithic & modular component design

Tools & Collaboration – Git, Jira, Agile/Scrum methodologies

AI Tools – ChatGPT, GitHub Copilot, Claude

PROFESSIONAL EXPERIENCE

Lead Software Engineer, Synechron Technologies Pvt. Ltd *Apr 2024–Sep 2025*

Senior Software Engineer, Synechron Technologies Pvt. Ltd *Apr 2021–Mar 2024*

Software Engineer, Synechron Technologies Pvt. Ltd *Apr 2019–Apr 2021*

Junior Software Engineer, Synechron Technologies Pvt. Ltd *Aug 2018–Apr 2019*

PROJECTS

MLeap - Multi-Tenant SaaS Platform for Home Appliance Insurance

Developed a multi-tenant SaaS platform for managing home appliance insurance policies, supporting both B2B (client onboarding) and B2C (end-customer) use cases. The solution consists of four integrated applications: End-User Portal, Agent/Admin Portal, Control & Configuration Portal, and Dev Tool Application.

- Led a team of 10 developers across the development of three integrated applications — End-User Portal, Agent/Admin Portal, and Control & Configuration Portal — ensuring on-time delivery and adherence to quality standards.
- Designed and developed core features for the End-User Portal and Agent Portal, including policy registration, claims processing, product registration flows, and configurable business rules per client.
- Integrated Amazon Connect for real-time customer support chat, developing a custom agent interface for multi-session handling, status management, and acceptance/rejection of chats, along with user-side integration using the Amazon Connect Chat Widget.
- Implemented OCR functionality using GPT-based models to automatically extract key details from purchase receipts and warranties, reducing manual entry time and improving registration accuracy.
- Optimized front-end performance by refactoring reusable components, reducing page load times, and improving rendering efficiency in Next.js applications.
- Enhanced back-end performance by optimizing MySQL queries, improving API response times, and reducing high-latency operations through code profiling and indexing strategies.
- Contributed to Control & Configuration Portal enhancements, enabling client onboarding, environment-specific rule management, and GitHub Actions-based CI/CD triggers for environment deployments (Dev, QA, Stage, Prod).
- Collaborated with product owners and business analysts to translate client requirements into scalable technical solutions while maintaining multi-tenant architecture best practices.
- Ensured high code quality by implementing Jest and Playwright test coverage, enforcing linting and formatting with Biome, and conducting regular peer code reviews.
- Enhanced Dev Tool Application by adding logic and features that allowed QA teams to quickly create policies, verify offers, and set up environment-specific test data, reducing QA preparation time and improving testing efficiency.

Next.js · TypeScript · Zustand · Vanilla CSS · Styled Components · tRPC · Fastify · MySQL · Drizzle ORM · Biome · Jest · Playwright · AWS (S3, IAM, ECS, Lambda, Amazon Connect, SQS, SES, API Gateway, Cloud Front, Route 53) · GitHub Actions · OpenReplay

AJKK - Mobile Device Insurance – Agent-Side Application

Developed an Agent-Side Application for a leading mobile device insurance provider, replacing a legacy .NET system with a modern ReactJS + Node.js architecture. The application enabled support agents to manage customer policies, process claims, and offer tailored resolutions in real time.

- Migrated critical business features from a legacy .NET application to a modern full-stack JavaScript architecture, ensuring functional parity while introducing new capabilities.
- Led feature development for Free Matrix and Suggested Matrix, implementing complex device recommendation and selection logic with real-time stock status.
- Developed a dynamic calendar control that consumed API-provided slot data to generate interactive date selectors for shipment scheduling — a high-complexity feature that significantly improved claim processing workflows.
- Worked closely with business analysts and stakeholders to gather requirements, analyze existing processes, and design scalable technical solutions.
- Implemented role-based access control to ensure correct feature availability per agent role.
- Integrated shipping service APIs to dynamically fetch and display available delivery options based on postal code and warehouse data.
- Applied detailed business rules for claims processing, ensuring accuracy across multiple claim types (exchange, repair, reshipment, reimbursement).
- Utilized OpenReplay to capture live agent sessions in production, enabling efficient debugging and faster turnaround for issue resolution.
- Participated in complex production issue investigations, analyzing code and business logic to identify root causes and deliver permanent fixes.
- Delivered multiple high-priority, business-critical features under tight deadlines, contributing to overall application stability and scalability.
- Leveraged AI tools (ChatGPT, Copilot) to speed up development and reduce debugging time by ~20%

ReactJS · React-Redux · Styled Components · Redux-Saga · React Query · Node.js · Express.js · GraphQL · OpenReplay · Jest · Cypress

ACHIEVEMENTS

- Led development of multi-tenant SaaS platform supporting B2B & B2C workflows
- Improved API performance by ~30–40% through backend optimization
- Reduced frontend load time by ~40% using component optimization
- Built custom Amazon Connect agent UI for multi-session chat handling
- Contributed to migration from legacy .NET to modern JS architecture

EDUCATION

Savitribai Phule Pune University

B.E, Computer Engineering