

MANISH KHEDEKAR

Software Engineer / Developer

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PROFESSIONAL SUMMARY

Full Stack Developer with 8+ years of experience in frontend (React, Angular, Vue, React Native) and backend (Node.js, Java, PHP) technologies. Proven expertise in databases (SQL, NoSQL, GraphQL) and building RESTful APIs with Serverless (AWS). Strong problem solver and collaborative team player with experience in overseeing complete development lifecycles. Focused on delivering scalable, high-performance, and user-friendly applications.

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, HTML5, CSS3, Java, PHP, Python, Dart, SQL

Frontend: ReactJS, Angular, AngularJS, Vue.js, React Native, Ionic, jQuery, D3JS, CryptoJS, Bootstrap, Tailwind

Backend: Node.js, Express, Spring Boot/MVC, Loopback, Django, Serverless

Databases: MySQL, MongoDB, DynamoDB, GraphQL, PostgreSQL

Cloud & Tools: AWS S3, EC2, RDS, Lambda, Jenkins, GitHub Actions, Docker, LightSail

Testing: Jest, Enzyme, Playwright, Cypress, Appium, React Testing Library, Supertest, WebDriverIO

Other: Git, Webpack, Agile, Scrum, TDD, Web Components, GitLab, Github, Bitbucket, Grunt, Gulp, npm, yarn

PROFESSIONAL EXPERIENCE

Principal Engineer | Wissen Technology Pvt Ltd | Oct 2025 - Present

Trafigura (Mumbai): Trafigura is one of the world's largest suppliers of commodities. Founded in 1993, we connect producers and consumers of minerals, metals and energy.

- Migrated existing enterprise application features to web based applications with React, Springboot and SQL.
- Explored Micro Frontend architecture in detail using Module Federation (Webpack 5), implemented common shared UI library using nexus and npm packages.
- Led agentic AI development for rapid productivity, completed two complete feature migrations in 3 months
- Provided standardized prompts for CoPilot for uniformity in software development tasks which helped rapid development, automated code review, bug fixes and simple readable coding patterns

Technology Lead | Synechron Technologies Pvt Ltd | Feb 2025 - Sept 2025

Emirates NBD (Dubai): One of the biggest banks of UAE, customer-facing banking application using MERN stack.

- Enhanced automation tests using Playwright framework with TypeScript configuration, implementing comprehensive test suites covering unit, integration, and end-to-end scenarios with 90% code coverage
- Explored Micro Frontend architecture in detail using Module Federation (Webpack 5), implementing independent deployments, shared dependencies management, and cross-team development workflows
- Improved application performance using frontend and backend best practices including React.memo optimization, lazy loading with Suspense, code splitting, bundle analysis, Node.js performance profiling techniques
- Worked on security measures for banking application implementing JWT authentication, OAuth 2.0 integration, CSRF protection, XSS prevention, and PCI DSS compliance standards for financial data protection
- Integration with CMS (Sitecore) to render components using RESTful APIs and GraphQL endpoints, implementing headless architecture with server-side rendering for dynamic content management

Software Consultant | Nu10 Technologies India Pvt Ltd | Aug 2022 - JAN 2025

RippleStreet (USA): Event management platform with admin panel, event builder, and marketing website.

- Developed UI based on Figma designs using React 17 with class and functional components, implementing

pixel-perfect responsive interfaces using CSS Grid, Flexbox, modern CSS3 features with cross-browser compatibility

- Integrated data fetching from PHP APIs and GraphQL via react-relay for efficient query management, implementing normalized caching, optimistic updates, and error boundary patterns for robust data handling
- Led migration to functional components for improved maintainability using React hooks (useState, useEffect, useContext, useReducer), eliminating class component lifecycle complexity and enhancing code reusability
- Implemented unit tests with Jest and React Testing Library achieving 85% coverage. Styled with JSS and Tailwind CSS 3.x for responsive UI, created static HTML pages in React for SEO-optimized marketing sections
- Integrated analytics to track user interactions for data-driven decisions using Google Analytics 4, Mixpanel event tracking, and custom analytics hooks for conversion funnel optimization
- Developed Node.js (Express) backend services and Apollo GraphQL gateway for data management, implementing schema federation, DataLoader for N+1 query optimization, and MongoDB integration with Mongoose ODM

SunContract (NFT and Blockchain): Blockchain-based solar panel NFT management platform emphasizing sustainability and innovation.

- Developed the UI with React 17, TypeScript 4.x, and Material UI 5.x for responsive experience, implementing custom theme configuration, dark mode support, and accessibility compliance with WCAG 2.1 standards
- Built the front-end application from scratch ensuring scalability and maintainability using component-driven architecture, custom hooks for blockchain interactions, reusable component library with Storybook docs
- Managed state with Redux Toolkit for smooth data flow across the app, implementing RTK Query for server state management, normalized state structure, and optimistic updates for blockchain transaction handling
- Developed backend services using ExpressJS with TypeScript and MySQL for data storage and API integration, implementing RESTful endpoints, JWT authentication middleware, and Sequelize ORM for database operations
- Conducted code reviews and refactoring for high-quality, optimized code using ESLint, Prettier configuration, SonarQube integration, and established coding standards with comprehensive documentation
- Led and mentored junior engineers, enforcing best practices in code quality through pair programming sessions, technical knowledge sharing, and implementing Git workflow with pre-commit hooks

Partnerize (Analytics and Marketing): Analytics and advertising platform generating revenue through ad commissions and marketing campaigns.

- Worked on server-side rendered React app implementing bug fixes, creating pages, and updating functionality. Integrated data from PHP APIs into React using Axios interceptors for seamless data management with error handling and retry logic
- Built functional components with custom CSS for consistent design using BEM methodology. Utilized Jest, Enzyme, and React Testing Library for unit testing ensuring high-quality code with comprehensive test coverage and mock implementations
- Worked with FlowJS and TypeScript for enhanced type safety and maintainability. Led migration of JavaScript components to TypeScript 4.x for improved performance, using strict type checking and custom type definitions
- Upgraded npm packages and maintained dependencies for optimal performance using automated dependency management. Contributed to shared utilities and Storybook updates for UI consistency across development teams
- Led migration of PHP services to Node.js (ExpressJS) for better backend performance, implementing microservices architecture, database abstraction layers, and Docker containerization for deployment optimization

Software Development Engineer | QuantInsti Quantitative Learning Pvt Ltd | Dec 2021 - Aug 2022

Quantra (E-learning Platform): Web application for learning Algorithmic Trading through mentor-led courses with AngularJS, Vue.js, Express (Node.js) and MySQL.

- Developed microservices in Express (Node.js) with MVC architecture and integrated with MySQL 8.0, implementing connection pooling, query optimization, stored procedures, and database migration strategies for scalable data management
- Built responsive UI using AngularJS 1.6, Sass preprocessing, and Vue.js 3 with JSX, implementing BEM methodology for scalable CSS architecture, component-based design patterns, cross-browser compatibility testing

- Led migration of jQuery UI components to modern Vue.js 3 Composition API for improved maintainability and performance, implementing reactive data binding, custom directives, and lifecycle management optimization
 - Migrated static data handling to dynamic content with ExpressJS services, implementing RESTful API endpoints, caching strategies with Redis, and real-time data synchronization for enhanced user experience
 - Collaborated with product team to address bugs and implement customer-driven improvements enhancing user experience through A/B testing, user feedback analysis, continuous deployment practices with feature flagging
- QI Website (Company Website):** Server-side rendered e-commerce site for purchasing company products built with Handlebars, jQuery, Express (Node.js), and MySQL.
- Developed microservices in Express.js with MVC architecture for scalability and performance, implementing middleware patterns, authentication layers, logging with Winston,
 - Implemented responsive UI with jQuery and Handlebars templates, migrating legacy code to Vue.js 3 components for better interaction and maintainability using modern JavaScript ES6+ features and component lifecycle optimization
 - Integrated LeadSquared Analytics for customer engagement tracking, built CRM integration, document creation services, and notification systems to enhance functionality with webhook handling and automated workflows
 - Resolved production bugs and implemented real-time feedback-driven enhancements to improve product stability and performance using monitoring tools, and performance optimization techniques

Senior Software Engineer | Till POS Technologies | Oct 2020 - Nov 2021

Payroo - Payroll Solution: Payroll web application enabling organizations to manage employee salaries and government tax payments using React, TypeScript, Loopback (Node.js), and DynamoDB.

- Developed responsive UI using React 17 with TypeScript (TSX) ensuring cross-browser compatibility and responsiveness across devices, implementing custom hooks, Context API for global state management, and React Router with route guards
- Built backend microservices in Loopback 4 (Node.js) with focus on scalability and efficiency, including implementation of unit tests with Jest and Supertest to ensure code quality with 90% test coverage and comprehensive API documentation
- Employed Single Table Design in DynamoDB to optimize database performance and integrated AWS Lambda functions with microservices for serverless architecture, implementing GSI patterns and CloudWatch monitoring for system reliability
- Followed BEM CSS methodology to create maintainable, modular CSS for front-end ensuring clean and consistent user interface with Sass preprocessing, responsive grid systems, and design token implementation
- Worked in Agile environment collaborating closely with cross-functional teams to deliver features from concept to production, including both frontend and backend development using Scrum methodology and sprint planning

Till-X - Hospitality Software Solution for Bepoz: Hospitality management solution built as a hybrid application with React Native, TypeScript, Node.js, Apollo GraphQL, and DynamoDB.

- Developed and maintained microservices using Loopback (Node.js) and Apollo Client for GraphQL ensuring efficient frontend-backend communication with schema federation, resolvers optimization, and real-time subscriptions implementation
- Built responsive UI in React Native for consistent experience across iOS, Android, and web platforms using platform-specific APIs, native module integration, and shared component architecture with TypeScript interfaces
- Used Single Table Design pattern in DynamoDB and integrated AWS Lambda for serverless microservices optimizing performance with efficient data access patterns, CloudWatch logging, automated scaling configuration
- Automated end-to-end testing with Cypress to ensure seamless user experience implementing custom commands, visual regression testing, and CI/CD pipeline integration for continuous quality assurance
- Managed complete lifecycle of features delivering end-to-end solutions that met all business requirements through requirement analysis, technical design, implementation, testing, and deployment coordination

Full Stack Developer | Perennial Systems | Apr 2019 - Oct 2020

MYO2 - Equal Experts: Long-running server-side rendered application with four SPAs, initially AngularJS migrated

to ReactJS with Spring MVC/Boot backend deployed on AWS.

- Contributed to migrating AngularJS modules to ReactJS with TypeScript improving maintainability and performance using component-based architecture, hooks pattern, and modern JavaScript ES6+ features with backward compatibility
 - Developed microservices in Spring Boot 2.x with unit and performance tests for system reliability implementing RESTful APIs, Spring Security authentication, JPA/Hibernate ORM with MySQL integration and connection pooling
 - Migrated backend services from Spring to ExpressJS (Node.js) for better scalability implementing microservices architecture, API gateway patterns, database abstraction layers, and containerization with Docker
 - Built reusable ReactJS components, managed state with MobX, and ensured cross-browser compatibility using Sass preprocessing, BEM CSS methodology, and Styled Components for consistent UI patterns across applications
 - Optimized build processes using npm and Webpack 4, ensured accessibility compliance with semantic HTML implementing WCAG 2.1 standards, progressive web app features, and performance optimization techniques
 - Added Adobe Analytics for tracking, created functional tests with Cucumber (Java) for end-to-end testing implementing BDD methodology, Selenium WebDriver automation, and comprehensive test reporting
 - Used CI/CD pipelines using Jenkins automated AWS deployments with performance testing in Scala implementing blue-green deployment strategies, Infrastructure as Code with CloudFormation, and monitoring with CloudWatch
 - Followed Agile methodologies (Kanban, TDD, Pair Programming) for efficient project delivery implementing sprint planning, daily standups, retrospectives, and continuous improvement practices
 - Designed software solutions for multiple client websites addressing complex business requirements through technical architecture design, stakeholder consultation, and cross-functional collaboration
 - Provided 24-hour technical support to troubleshoot and resolve issues implementing on-call rotation, incident management procedures, escalation protocols, and post-mortem analysis for continuous improvement
- mClinica Connect:** Multi-tenant platform for different mClinica clients to manage product sales, online/offline stores, sales executives and customers with separate web applications per client.
- Written React functional and class components with JSX and styled components in BitBucket implementing Higher-Order Components (HOC), render props patterns, compound components, and reusable component architecture
 - Used redux-saga in frontend to manipulate UI and handle API calls to backend implementing complex async flow control, race condition handling, side effect management, and optimistic update patterns
 - Written APIs in ExpressJS (NodeJS) with Sequelize ORM for MySQL 5.7, worked on nested SQL queries implementing complex joins, subqueries, database transactions, and query optimization for performance improvement
 - Handled asynchronous tasks in NodeJS using promise chaining and error handling implementing async/await patterns, concurrent API calls optimization, timeout handling, and comprehensive error logging
 - Worked with HighCharts in React for graphs and visualization implementing interactive dashboards, real-time data updates, custom chart configurations, responsive layouts, and export functionality
 - Written unit tests and integration tests for both UI and APIs using Jest, Jasmine, Mocha and Supertest achieving comprehensive code coverage with mock implementations and automated test execution
 - Written automation tests for Android app with Appium WebDriverIO using SCRUM methodology implementing cross-platform mobile testing, device farm integration, and continuous testing pipeline

Associate Developer | Capco Technologies | Aug 2017 - Apr 2019

Front End Training - Backbase Platform: Specialized training in front-end technologies with focus on Backbase platform, building internal POCs and mastering modern web tools.

- Completed intensive training in HTML5, CSS3, JavaScript ES6+, and AngularJS for Backbase platform development mastering enterprise banking widget architecture, theme customization, and customer experience platform integration
- Developed internal POCs to showcase Backbase's functionality and capabilities implementing widget communication patterns, API integrations, responsive design, and cross-browser compatibility testing

- Gained hands-on experience with Grunt and Gulp to optimize workflows and improve build processes implementing task automation, Sass compilation, JavaScript minification, image optimization, and deployment pipeline configuration
 - Trained in asynchronous JavaScript to create responsive, high-performance web applications implementing Promise patterns, async/await syntax, callback management, XMLHttpRequest handling for banking applications
 - Became Backbase Certified Front-End Developer demonstrating proficiency in Backbase development through comprehensive examination covering platform architecture, widget development, and integration best practices
- SCB Life Insurance (SCB, Thailand):** Hybrid mobile application for SCB Thailand's insurance product targeting Android and iOS platforms using Ionic 2 and Angular framework.
- Led development of cross-platform hybrid app with Ionic 2 and Angular 2+ for Android and iOS implementing native device integration through Cordova plugins, responsive design patterns, and platform-specific optimizations
 - Implemented Spring Boot backend with MySQL and used Jenkins for CI/CD to ensure rapid releases with automated builds, unit testing, code quality gates using SonarQube, and multi-environment deployment strategies
 - Created custom JavaScript plugins to integrate Ionic-Cordova, Angular, and React Native components implementing bridge communication between JavaScript and native code with custom plugin architecture patterns
 - Designed complex UIs, integrated third-party APIs, and ensured responsive experiences across devices implementing Material Design principles, touch interactions, and device-specific UI adaptations
 - Developed key modules like charts, security, camera, notifications, and GPS using custom libraries implementing D3.js visualizations, biometric authentication, media capture, push notifications, and location services
 - Integrated Firebase Analytics, push notifications for improved user engagement and performance tracking implementing event tracking, user segmentation, A/B testing, and real-time analytics dashboard
 - Worked in Agile teams collaborating to meet deadlines and manage resources efficiently using Scrum methodology, sprint planning, daily standups, and cross-functional team coordination
 - Implemented security measures like firewalls, encryption, and session management for data protection using OAuth 2.0 authentication, SSL pinning, data encryption with CryptoJS, and secure storage patterns
 - Utilized D3.js library for data visualization, CryptoJS for security, and NativeStorage for mobile data management implementing interactive charts, secure data transmission, and offline data persistence
- Resource Database - Capco HCOPS Team:** Web application for HR and project management teams to track employee resources and project status.
- Led development of Resource Database using Angular 4 and ng-cli for scalable, maintainable code, component-based architecture, services with dependency injection, reactive forms validation, routing config
 - Designed responsive UI with Angular 4 and Bootstrap for seamless performance on all devices implementing responsive grid system, component theming, cross-browser compatibility testing, and mobile-first design approach
 - Developed role-based access features for HR and Project Managers to track and restrict employee updates implementing RBAC system with JWT tokens, route guards, role-based UI rendering, secure API access control
 - Built RESTful backend services with Spring MVC, Hibernate and MySQL for efficient data handling implementing service layer architecture, transaction management, connection pooling, and database optimization techniques
 - Conducted unit testing to ensure code quality following TDD best practices implementing comprehensive test suites with Jasmine and Karma, mock services, automated test execution, and continuous integration pipeline
 - Optimized the app's mobile compatibility for adaptive, responsive design implementing touch-friendly interfaces, mobile navigation patterns, progressive web app features, and offline functionality support

EDUCATION

B.Tech in Computer Engineering

Dr Babasaheb Ambedkar Technological University, Lonere | Jun 2013 - Jul 2017