KOMARLA MADHU

Full Stack Developer | React.js · TypeScript · NestJS · Node.js · Kafka · Microservices

+91 63008 50684 | komarlamadhu7@gmail.com | Bengaluru, Karnataka | linkedin.com/in/komarlamadhu | github.com/204g1a0549

PROFESSIONAL SUMMARY

Full Stack Developer with 2 years of experience at FreshToHome building an enterprise pricing and catalog management platform used across multiple geographies and partner channels. Sole frontend engineer who architected and shipped 4 production systems from scratch using React.js, TypeScript, and Ant Design, backed by NestJS/Node.js/Spring Boot microservices and Kafka-based event-driven pipelines. Delivered measurable impact: 25% faster API response times, 20% lower page load time, and 30% faster deployments via Docker and CI/CD. Experienced in RBAC, approval workflows, OpenAI API integration, and AI-assisted development. Seeking Full Stack / Frontend / Backend roles at product companies.

TECHNICAL SKILLS

Frontend: React.js, TypeScript, JavaScript (ES6+), Redux, Ant Design (antd), HTML5, CSS3, React Hooks, Responsive UI, Component Optimization, Code Splitting, Lazy Loading

Backend: NestJS, Node.js, Java, Spring Boot, REST API Design, Microservices Architecture, Event-Driven Architecture, Apache Kafka

Databases: MySQL, PostgreSQL, MongoDB, SQL Query Optimization, Caching, Indexing, Schema Design

DevOps & Tools: Docker, CI/CD Pipelines, Git, GitHub, Postman, Linux, Shell Scripting

AI / LLM: OpenAI API, Prompt Engineering, LLM Integration, AI-assisted Development

Security & Testing: JWT, SSO, Role-Based Access Control (RBAC), API Authentication & Authorization, Jest, API Testing, Manual Testing

WORK EXPERIENCE

Associate Software Engineer — FreshToHome, Bengaluru *Sep 2024 – Present (~2 Yrs)*

Sole frontend engineer owning 4 production systems end-to-end, from architecture to deployment, on India's leading fresh food e-commerce platform.

- Built reusable, high-performance React.js + TypeScript components with Ant Design, reducing re-renders and improving maintainability across product modules.
- Reduced page load time by 20% through rendering optimization, code splitting, lazy loading, and component restructuring.
- Developed backend microservices in NestJS, Node.js, and Java following domain-driven design; improved API response time by 25% via SQL query tuning, caching, and indexing.
- Implemented Kafka-based event-driven systems for real-time pricing updates, inventory sync, and partner workflow automation.
- Secured all REST API endpoints with JWT and SSO-based authentication and authorization.
- Containerized applications with Docker and enhanced CI/CD pipelines, cutting deployment time by 30%.
- Integrated OpenAI APIs and applied prompt engineering to automate repetitive coding tasks and accelerate feature prototyping.

KEY PROJECTS

Pricing Editor Platform — Geo & Partner Pricing Management | FreshToHome *Nov 2025 – Present*

Tech: *React.js, TypeScript, NestJS, Spring Boot, Apache Kafka, PostgreSQL, MongoDB, Docker, Ant Design*

- Designed and developed an enterprise pricing management platform for configuring MRP, Selling Price, discounts, markups, and markdowns across multiple geographies and partner channels.
- Built reusable editable data grids with inline editing, filtering, sorting, pagination, search, undo/review changes, and export — the platform's core workflow for catalog operations at scale.
- Implemented a threshold validation engine preventing invalid MRP/SP updates outside configured business limits, with an approval workflow and audit history for all pricing modifications.
- Developed bulk product upload, template download, CSV import/export, and Magento catalog synchronization for consistent pricing across systems.
- Implemented Role-Based Access Control with granular permissions for Viewer, Editor, Reviewer, QC, Admin, and partner-specific roles.
- Integrated asynchronous APIs with polling to track background publish/send operations without blocking the UI; optimized frontend with memoization, React hooks, and efficient state management.
- Collaborated with QA, Product Managers, and backend teams across feature development and production releases.

Administration & Configuration Portal | FreshToHome *Jul 2025 – Nov 2025*

Tech: *React.js, TypeScript, NestJS*

- Built a Guardrail Configuration module allowing administrators to manage pricing validation rules and business constraints without code deployment.
- Developed a Role Configuration module supporting dynamic role creation and permission mapping, enforcing RBAC across all application modules.
- Implemented audit logs tracking user activities and configuration changes, plus profile management for user preferences and account settings.

Geo & Partner Product Integration System | FreshToHome *Mar 2025 – Jul 2025*

Tech: *React.js, TypeScript, NestJS, REST APIs, PostgreSQL*

- Developed product integration workflows for onboarding products into geo-specific pricing catalogs with configurable regional pricing.
- Built partner mapping enabling products to be configured independently across multiple business partners, with configurable MRP/SP, markup, markdown, and discount rules.
- Implemented validations enforcing configurable threshold limits; created reusable product search, filtering, and catalog management modules.
- Improved user productivity through bulk actions and automated validations.

Pricing Automation Engine — Event-Driven Price Sync | FreshToHome *Nov 2024 – Mar 2025*

Tech: *NestJS, Apache Kafka, PostgreSQL, React.js, TypeScript, Docker*

- Developed an event-driven pricing automation engine using Kafka that automatically recalculates regional prices after inventory synchronization — eliminating manual pricing effort.
- Built partner-specific pricing pipelines supporting tier-wise, configurable business rules across geographies.
- Implemented asynchronous background workers for high-volume price updates with real-time visibility in React UI modules.

Public Reviews on Government Schemes | Academic Project *Jan 2024 – Jun 2024*

Tech: *Python, Machine Learning, CNN, NLP, Sentiment Analysis*

- Built an ML web app analyzing public opinion on government schemes via text, ratings, and CNN-based facial sentiment analysis.

EDUCATION

B.Tech, Computer Science & Engineering — Srinivasa Ramanujan Institute of Technology, Anantapur *2020 – 2024 | CGPA 8.59/10*

Intermediate (MPC) — SDHR Junior College, Tirupati *2018 – 2020 | 98.4%*

CERTIFICATIONS & ACHIEVEMENTS

- Core Java (Udemy) · Programming Essentials in C++ (C++ Institute) · Salesforce Virtual Internship (SmartInternz)
- Ranked 2nd, HackWithSRIT Coding Competition (2022 & 2023)
- Solved 100+ problems on LeetCode and Codeforces