Komal Trivedi Bangalore, India

+91 9945093413

komals1441997@gmail.com   https://github.com/komal-sainath   https://www.linkedin.com/in/komaltrivedi14/

SUMMARY

- Highly organized, team driven and result oriented **Fullstack Engineer** with **6 years of experience** across frontend, backend, and mobile development. Specialized in building scalable AI-powered applications, conversational interfaces, and intelligent automation tools.
- Experience in developing *frontend* applications using **JavaScript, TypeScript, React & Redux**; *backend* development using **Node JS, Snowflake, Python, LangChain, C# .NET**.

SKILLS:

Software languages and frameworks used	- JavaScript, TypeScript (React, Redux, ContextApi, zustand, React Query) - Node JS, Express, Python, fastAPI, Jest, C#, .NET (Dapper, LINQ) - HTML/CSS (SCSS, Material Design – material UI, bootstrap, tailwindCss)
AI/LLM Integration	- LangGraph, RAG Architecture, OpenAI APIs, Streaming AI Responses - AWS Sagemaker, Amazon Q Business
Versioning Tools used	- Git, GitHub, Azure DevOps
SQL DBMS used	- SQL server Management Studio (SSMS), Azure Data Studio, Redis Database, Snowflake
IDE	- VS Code, Visual Studio
Other tools Used	- Fiddler, TraceView, Postman, SnoopWPF, Swagger,

WORK EXPERIENCE:

Developer at 3M – Digitization & Advanced Analytics - Supply Chain (Feb 2022 - Present)

- <u>Used:</u> *JavaScript, TypeScript, Node JS, Python, Jest, React, Redux, LangChain/LangGraph, SQL, Snowflake, Azure, AWS*
- Built a next-gen agentic conversational AI platform using LangGraph, RAG architecture, React, Python, AWS, and WebSockets for real-time LLM interactions.
- Developed Sourcing Price Optimiser (SPO) to visualize vendor spend, material intelligence, and plant-level metrics across 3M's global supply chain.
- Created INVENTO, an inventory automation tool leveraging ML models to optimize warehouse replenishment.
- Designed and implemented a custom RASCI management tool for mapping organizational responsibilities.
- Led savings tracker development that contributed to ~$300M in cost savings.
- Conducted code reviews and mentored junior developers on best practices.

Software Engineer at Vela Technologies India - Ascertra (Dec 2019 – Feb 2022)

- <u>Used:</u> TypeScript (React), Redux, Hooks, HTML/CSS, .NET 5, Azure Data Studio, Xamarin
- Core contributor to Proarc, an engineering document management system.
- Worked within an agile (scrum) team and helped prioritize and scope feature requests to ensure that the biggest impact features were worked on first.
- Developed react pages and made UI/UX improvements on customer facing web applications that helped in increasing performance and loading of pages significantly.
- Built RESTful Services, exposed endpoints for accessing and managing data in relational databases and providing json data to frontend using HATEOAS links.
- Wrote Integration tests and Unit tests for features developed that helped identify customer bugs easily.
- Built pages using Xamarin with MVVM architecture for the product's mobile development application.

HIGHLIGHTED PROJECTS:

1. **Supplier Navigator AI (2024–Present)**
   Designed and built a next-generation, agentic AI conversational assistant that recommends optimal vendors for material procurement based on real-time pricing data.
   - The system uses Python, LangGraph and RAG architecture in AWS SageMaker to integrate internal ERP data and externally crawled web sources.
   - Enables 3M users to interactively query material costs, supplier options, and performance metrics.
   - Supports streaming LLM responses with semantic search, multi-agent routing, and real-time dashboarding.
   - Technologies: React, Python, AWS, WebSocket, Snowflake, LangGraph, OpenAI APIs.

2. **Sourcing Price Optimiser (SPO) (2023-Present)**
   Enterprise-grade dashboard for analyzing vendor spend and sourcing decisions across 3M's global supply chain.
   - Aggregates material, vendor, plant, and business unit data to visualize total costs and strategic procurement opportunities.
   - Implements filters for business groups, plants, vendor categories, and material groupings to drive granular analysis.
   - Integrates historical spend analytics with live vendor input via REST APIs and Snowflake queries.
   - Linked with the Conversational AI assistant for dynamic recommendations based on contextual queries.
   - Technologies: React, Node.js, Snowflake, TypeScript, GitHub Actions, Azure DevOps

3. **RASCI Management Tool (2022-2023)**
   Created a responsive interface to map roles and responsibilities across complex supply chain tasks.
   - Focused on usability and Snowflake-backed data architecture.
   - Technologies: React Hooks, Node.js, Snowflake.

4. **INVENTO – Inventory Automation Tool (2022)**
   Designed and developed an ML-powered inventory request system to optimize warehouse replenishment cycles.
   - Included dynamic dashboards, workflow engines, and integration with Snowflake.
   - Technologies: React, Node.js, Snowflake.

5. **Proarc – Engineering Document Management System (2019-2022)**
   As part of the core team, developed desktop, mobile (Xamarin), and web applications that streamlined document management for engineering firms.
   - Built RESTful APIs using .NET, designed UI components in React/Redux, and implemented MVVM architecture for mobile.
   - Integrated features for document search, access control, and versioning.
   - Technologies: React, Redux, .NET, Visual Studio

EDUCATION:

- B.E. in Computer Science and Engineering from East West College of Engineering, Visvesvaraya Technological University (VTU), *2015-2019*
- *11th and 12th std PCMB from Kendriya Vidyalaya Hebbal, Bangalore, 2013-2015*