

Swapnil Yelkar

Technical Lead Engineer | AI Engineer

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📍 Oakville, Ontario, Canada

SUMMARY

Technical Lead Engineer with 14+ years of experience delivering enterprise-scale applications in regulated environments. Strong background in UI and application architecture, cross-team technical leadership, and production systems. Recently expanded into Generative AI and Agentic AI systems, building AI-powered developer and productivity agents using Python, CrewAI, Google ADK, OpenAI MCP, and modern LLM tooling

CORE SKILLS

- Technical Leadership & Architecture Direction.
- Enterprise Application Development (Web & UI Platforms)
- Angular & React Architecture (Shared Libraries, Design Systems).
- API-Driven Systems & Application Integrations.
- Cloud-Ready Frontend Platforms & CI/CD Pipelines
- SDLC, Code Reviews, Branching & Release Management.
- Performance Optimization & Production Support.
- Security-Aware Frontend Integration (OAuth, JWT concepts)
- Automated Testing & Quality Governance
- Agile / SAFe Delivery
- AI-Assisted Development (GitHub Copilot, OpenAI SDK)
- Designed and implemented Agentic AI workflows using Python, CrewAI, and Google ADK, focusing on task orchestration, tool usage, and multi-agent collaboration.

EXPERIENCE

Roche (RIS) | Technical Lead Engineer | UI Architect

06/2022 - 10/2025

Navify Clinical Hub ↗

Navify Clinical Hub is a global clinical platform supporting oncology decision-making workflows.

- Set technical direction for frontend and application architecture across multiple initiatives within a large enterprise platform.
- Led design and implementation of Angular and React-based applications integrated with backend services and APIs in regulated environments.
- Acted as in-house technical expert, resolving complex architectural and production issues across teams.
- Delivered a production-ready AI Patient Chart proof-of-concept within one month, enabling executive buy-in and funding.
- Owned end-to-end delivery including design, build, testing, release, and stabilization phases.
- Drove modernization initiatives to standardize architecture, reduce technical debt, and improve long-term maintainability.
- Implemented performance optimization strategies including lazy loading and code splitting to improve runtime efficiency.
- Established automated testing strategies and quality gates using Jest, Testing Library, Cypress, and Playwright.
- Championed accessibility and compliance standards (WCAG 2.2, ARIA) across shared UI components.
- Served as Engineering Excellence Lead, defining review standards, governance practices, and mentoring junior engineers.
- Collaborated with global product, backend, platform, and leadership stakeholders.
- Explored and prototyped Generative AI and Agentic AI capabilities to enhance developer productivity and platform workflows, applying structured prompt design, agent orchestration, and enterprise-ready AI integration patterns.

Recognition:

- Rated "Exceeds Expectations" for three consecutive years.

BMC Software Sr. Product Developer	01/2018 - 06/2022
Helix Business Workflows - Innovation Suite Application ↗	
Helix Business Workflows is a scalable SaaS case-management platform serving enterprise customers.	
<ul style="list-style-type: none"> • Built and scaled frontend systems for a high-traffic SaaS platform used across multiple business domains. • Designed reusable Angular component libraries shared across teams. • Integrated frontend applications with backend services and APIs. • Collaborated with product and UX teams to refine user flows while maintaining system reliability. • Supported CI/CD pipelines and Agile delivery for shared codebases. 	

Cognizant Associate Project	09/2016 - 01/2018
Helix Business Workflows - Application	
UI Developer, Cognizant (on-site at BMC Software)	
<ul style="list-style-type: none"> • Developed reusable frontend components for enterprise-grade web applications. • Supported production systems and collaborated closely with client engineering teams. 	
Ebix Software India (Zinnia) System Analyst - II	07/2011 - 08/2016
SmartOffice - CRM ↗	
A CRM product specialized in Insurance and Investment domain. SmartOffice is a huge enterprise application product which has almost everything in insurance and investment domains.	
<ul style="list-style-type: none"> • Contributed to a large enterprise CRM platform in the insurance and investment domain. • Developed frontend components, conducted code reviews, and supported long-term product evolution. 	

EDUCATION

Graduation in Information Technology	09/2007 - 04/2011
GuruNanak Institute of Engineering & Technology, Nagpur University - Bachelor's of Engineering	
<ul style="list-style-type: none"> • First Class Division 	

CERTIFICATES

AI Engineering Agentic Track : The Complete Agent & MCP Course ↗	12/2025 - Present
Udemy	
Google Agentic Kit (ADK) ↗	12/2025 - Present
Udemy	
Karrikins Alignment Accelerator ↗	01/2025 - Present
Karrikins Group	
Certified SAFe® 5 Practitioner ↗	07/2022 - 07/2023
Scaled Agile Inc	