

KOMAL N BAHETWAR

Staff Software Engineer | AI-Native Systems Architect | Distributed Systems, DDD & Event-Driven Architecture

✉ komalnbahetwar@gmail.com 📍 Hyderabad, India 🌐 <https://komalnbahetwar.substack.com>

🌐 <https://www.linkedin.com/in/komal-bahetwar-59735029> 📄 <https://github.com/komal-bahetwar>

PROFESSIONAL SUMMARY

Staff Software Engineer with 14+ years of experience designing distributed backend systems and domain-centric enterprise platforms. Specialized in Domain-Driven Design (DDD), CQRS, Event Sourcing, and AI-native system architectures for building scalable, auditable, and cloud-native financial platforms. Experienced in architecting and scaling early-stage (0→1) fintech and AI-native platforms from foundational system design to production-grade distributed systems. Hands-on expertise in distributed backend engineering using C#/.NET and Python, building financial modeling systems, LLM-powered workflows, document intelligence platforms, AI-assisted operational systems using RAG and orchestration patterns, and engineering workflows enhanced through Agentic SDLC.

WORK HISTORY

Staff Software Engineer

07/2022 - Present

Qapita

Hyderabad, Telangana

Internal title: Director of Technology - Individual Contributor

- Engineered the foundational AI platform and backend architecture for an AI-native Fund Administration solution, combining LLM-driven orchestration, event-driven workflows, and auditable system design to enable compliant AI-assisted financial operations at scale.
- Designed an LLM-powered document ingestion pipeline that transforms unstructured Excel financial data into validated domain models, automating complex data preparation workflows and reducing manual effort by ~70%.
- Designed an Agentic SDLC approach using AI agents across requirement understanding, PRD creation, story generation, implementation, quality checks, and deployment strategy, with human approval gates at each stage.
- Led the design of backend pipelines for an AI Customer Success Copilot using Agentic AI / RAG and Prompt Engineering, integrating knowledge retrieval to improve agent productivity by ~40%.
- Guided architectural direction for distributed and AI-enabled platforms, driving design reviews, technology selection, and engineering standards across multiple product initiatives.
- Modernized backend systems from Modular Monolith Architecture to distributed services, applying Domain-Driven Design (DDD), CQRS, and Event-Driven Architecture with Messaging Systems (NServiceBus).
- Designed and built a financial calculation engine for equity plan modeling and simulation, reducing consulting advisory turnaround time by ~60% through scalable backend services and React.js-driven user workflows.
- Conceptualized backend systems supporting on-premise and cloud deployment models, incorporating PII encryption, data isolation, and GDPR compliance requirements across sensitive financial workflows.
- Orchestrate backend systems end-to-end, including deployment, performance tuning, production debugging, and resolution of complex concurrency and data consistency issues.

SENIOR SOFTWARE ENGINEER

11/2020 - 06/2022

Qapita

Hyderabad, Telangana (Remote)

- Led the evolution of a cloud-native Microservices Architecture using ASP.NET Core, Node.js, and REST APIs, improving service reliability by 30% while leveraging Docker, Kubernetes, and AWS / Azure for scalable and highly available deployments.
- Established engineering excellence through CI/CD Pipelines modernization and automated Unit / Integration Testing, increasing automation coverage by 40% and achieving 99.9% build success rates.

SENIOR SOFTWARE ENGINEER

10/2014 - 09/2020

Camp Systems Pvt. Ltd.

Hyderabad, Telangana

- Improved system performance by identifying and fixing complex technical issues in key modules. This reduced processing time for high-volume aviation workflows by about 20%.
- Reviewed peer code submissions and provided clear feedback. This helped reduce recurring defects in the reviewed components, and improved overall code quality.

SOFTWARE ENGINEER

GGK Technologies Pvt. Ltd.

07/2012 - 10/2014
Hyderabad, Telangana

- Developed and scaled key system components in C#/.NET, enhancing platform functionality and scalability for growing client workloads.
- Optimized application reliability by 20% through profiling and debugging critical code paths to reduce errors and improve module stability.

SKILLS

• Distributed Systems	• ASP.NET Core	• MongoDB
• Domain-Driven Design (DDD)	• React.js	• Python
• Event-Driven Architecture	• Node.js	• LLM Systems
• Modular Monolith Architecture	• Unit / Integration Testing	• Agentic AI / RAG
• CQRS	• Event Sourcing	• Prompt Engineering
• Clean Architecture	• Messaging Systems	• LangGraph
• System Design	• AWS / Azure	• LangFuse
• Microservices Architecture	• Docker	• VectorDb
• C#	• Kubernetes	• FastAPI
• .NET	• CI/CD Pipelines	

EDUCATION

Bachelor of Technology (B. TECH)	2008 - 2012
Shri Guru Gobind Singhji Institute of Engineering and Technology	Nanded, MH, India
Computer Science & Engineering	GPA: 7.13/10
Executive Education Program - Agentic & Generative AI	2026
Indian Institute of Science (IISc)	Bengaluru

CERTIFICATIONS

AI For Everyone	03/2024
Coursera	
Problem Solving (Basic) Certificate	09/2020
Hacker Rank	
Algorithms: Design and Analysis, Part 1	08/2016
Coursera	
Data Structure and Algorithms	05/2009
NIIT limited	

AWARDS & TECHNICAL PROJECTS

Multi-Agent Code Review & Auto-Debugging System	2026
Indian Institute of Science (IISc), Executive Education Program - Agentic & Generative AI	
Architected a LangGraph-based multi-agent platform where Security Analysis, Bug Detection, Patch Generation, and Test Generation agents collaborate through Supervisor-Worker orchestration.	
Built a RAG-powered code intelligence system using OWASP/CWE knowledge bases, LangFuse, FastAPI, and Docker to automate secure code review and AI-assisted debugging workflows.	
Evaluated agent performance across code-review, bug-fixing, patch-generation, and test-generation scenarios using automated evaluation metrics, test execution, and RAGAS-based evaluation.	
First Place, Qapita Internal Hackathon	2023
Qapita	
Recognized for innovation and business relevance of the AI-Assisted Equity Planning Tool, which was subsequently developed into a full production application.	