

KIRAN PURUSHOTHAM

EXECUTIVE DIRECTOR, SR. PRINCIPAL ARCHITECT

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SUMMARY

Results-driven leader in Enterprise and Solutions Architecture with 18+ years of experience leading large-scale cloud transformations, AI-driven initiatives, and data-centric architectures across Banking & Financial Services, M&A, Connected Vehicles, and Corporate Security domains. Proven ability to define and execute technology roadmaps, modernize legacy platforms, and lead high-impact AI and Data strategies. Led architecture and design of JPMorgan Chase's Multi-LLM Agent Framework, securing two U.S. patent applications and saving \$2M annually in developer productivity. Directed public cloud modernization of 30+ banking platforms, cutting infrastructure costs by 30%, and architected AI-driven document processing, boosting efficiency for operations and document processor teams by 85%. Architected Deloitte's Total M&A Solution, streamlining 40+ M&A deals. Guided 15+ Enterprise and Solutions architects to align AI and cloud innovations with business goals, driving operational excellence.

CERTIFICATIONS

- Microsoft Certified Azure Solutions Architect Expert
- AWS Certified Solutions Architect - Professional
- TOGAF 9 Certified Architect (The Open Group)
- AWS Certified Machine Learning – Specialty
- Microsoft Certified: Azure Data Scientist Associate
- Certified Blockchain Expert™
- Tableau Desktop Specialist
- Oracle Certified Java Developer
- Oracle Certified Web Component Developer
- Microsoft Certified Technology Specialist: SQL Server - Database developer

PROFESSIONAL EXPERIENCE

**Executive Director, Sr. Principal Architect / Head of Architecture,
Global Banking Wholesale Client Servicing**

**AUG 2022 – PRESENT
Plano, TX**

JPMorgan Chase & Co.

- Defined and executed a technology modernization strategy for Wholesale Lending Services (WLS), leading cloud migration for 30+ applications to AWS, reducing infrastructure costs by 30% (\$2.2M/year savings), improving scalability, and cutting release cycles by 40%.
- Architected and led development of Multi-LLM Agents Framework, an enterprise-scale AI orchestration platform for financial services, integrating state management, agent coordination, and governance. Two patents filed on the architecture.
- Designed and developed an AI-powered document intelligence system to identify and eliminate duplicate loan notices across multiple source systems. Leveraging OCR, Classification, and entity extraction, automated loan notice processing, increasing efficiency by 85% and reducing manual review time.
- Developed and launched a multi-tenant Retrieval-Augmented Generation (RAG)-as-a-Service platform, enabling enterprise teams to deploy generative AI search and retrieval solutions, cutting onboarding time from weeks to hours and supporting 30+ clients.
- Architected and developed an LLM-powered document generation solution, replacing vendor product for creating deal lifecycle documents. By leveraging LLMs to generate documents using existing templates and integrating Microsoft SDKs for document structuring, reduced time-to-market by 2 weeks per template and eliminated \$4M in annual vendor license costs.

- Established a FinOps Center of Excellence, implementing cloud cost optimizations that reduced AWS and on-prem expenses by 30%, leveraging rightsizing, auto-scaling, workload automation, and cloud custodian policies.
- Architected Wholesale Lending Services Document Processing, using AI (Instabase) to cut processing time by 40% (800+ hours saved) and errors by 25% for 1,000+ loans.
- Created an Architecture Review Board to enforce design consistency, align technology strategies with business goals, and standardize AI and cloud adoption practices across Commercial Banking.

Solutions Architect, Mergers and Acquisitions

DEC 2019 – JUL 2022

Deloitte Services LP

Phoenix, AZ

- Led architecture strategy for Mergers & Acquisitions (M&A) technology solutions, delivering 20+ enterprise applications for due diligence, transaction processing, and post-merger integration, improving onboarding from 2–3 weeks to real-time, streamlining 40+ deals, and saving \$500K/year in practitioner time.
- Designed Connected Vehicle (V2X) solutions, leading architecture for Vehicle-to-Vehicle (V2V), Vehicle-to-Network (V2N), and Vehicle-to-Infrastructure (V2I) applications using AWS Outposts, MEC, and 5G technologies.
- Conducted technical due diligence for 10+ acquisitions, assessing software architecture, AI/ML maturity, security, and cloud infrastructure to drive strategic investment decisions.
- Developed and led implementation of Deloitte's Enterprise AI/ML Governance Framework, integrating AI ethics, risk management, and operational governance into Deloitte's engineering and architecture practices.

Technology Lead

MAR 2015 – DEC 2019

Zenmonics Inc.,

Charlotte, NC

- Led design, technical architecture and delivery of omnichannel banking platform called channelUNITED, a unique in the pluggable architecture that allows customers to define the feature sets that retail, commercial sales & operations teams want to enable for each channel, device and role.
- Managed large engineering teams to deliver development projects of core channelUNITED omnichannel platform products such as Online Account Opening, Financial Center, Consumer Loans and Online Banking applications.
- Spearheaded the initiative in road mapping and strategically outlining the containerization process for the channelUNITED omnichannel platform using Kubernetes.
- Responsible for driving Data Science and Machine Learning solutions for banking clients, most notably using simulation and optimization techniques for optimizing banking center capacity based on customer arrival patterns.
- Led transformation of on-premises services to public cloud including design, prototype and delivery of cloud-native solutions.

Technology Lead

JUL 2013 – MAR 2015

Infosys Limited (Employer), Bank of America (Client)

Charlotte, NC

- Spearheaded design and development of Bank of America's sales and services platform, leading complex changes in Interact UI, FIS Xpress APIs, and FIS Profile database to implement SafeBalance Banking, launching a no-overdraft account type for 7M+ accounts by 2024, reducing processing delays by 30%, and enhancing financial inclusion for youth and young adults.
- Designed and integrated Preferred Rewards Program within Interact UI, enabling bankers and call center staff to manage tiered benefits (Gold, Platinum, Platinum Honors), boosting customer engagement and increasing program adoption by 20% across millions of clients.

Technology Analyst*Infosys Limited (Employer), Citigroup Wealth Management (Client)***SEP 2008 – JUN 2013****Bangalore, India**

- Led technical design and development of OneSource, an Online Account Opening application for Citi Private Bank's wealth management clients, streamlining onboarding for high-net-worth individuals and families.
- Managed software development lifecycle for scalable financial systems, leveraging Java/JEE, Spring/Struts, JSP, Servlet, JavaScript, AJAX, and SOAP/REST web services to ensure secure, efficient client experiences.
- Developed a web search engine for Citi Private Bank's website and OneSource application using Apache Nutch, enhancing navigation and accessibility for high-net-worth clients.

Research Intern, Council of Scientific and Industrial Research*Central Food Technological Research Institute (CFTRI)***JUN 2007 – MAY 2008****Mysore, India**

- Collaborated with Principal Scientists, built a prototype for low-fat snack frying machine enabling continuous industrial production and product standardization.
- Designed a variable-speed conveyor chain and a sectional temperature control system to ensure support for a variety of products.

EDUCATION**Doctor of Engineering in Data Analytics & Artificial Intelligence****AUG 2023 - APR 2026**

Penn State University

University Park, PA

Master of Science in Machine Learning & AI**JAN 2020 - DEC 2021**

Liverpool John Moores University

Liverpool, United Kingdom

Bachelor of Engineering in Mechanical Engineering**JUL 2004 - JUN 2008**

The National Institute of Engineering, Mysore, India

Visvesvaraya Technological University

TECHNICAL SKILLS

- Enterprise/Solution Architecture
- Cloud Computing – AWS, Azure
- Compute, Containers, Database, IoT, Machine Learning, Networking, Security, Serverless, Data and Analytics
- TOGAF 9
- Connected Vehicles – V2V, V2N, V2I Architecture
- Java, Python, R
- Docker, Kubernetes
- IoT, Edge Computing
- Databases - AWS RDS, AWS DynamoDB, Azure SQL, AWS OpenSearch
- Data and Analytics – Apache Spark, Azure Databricks, Azure Synapse Analytics
- AI/ML – ML Algorithms, Computer Vision, NLP; Azure ML, AWS SageMaker, Azure Databricks
- Technical Due Diligence for Acquisitions
- LLM Agents – AWS Bedrock, LangChain, LangGraph, LangServe, LangSmith and LangFlow