

[Krishnan Mani](#) Oxford, UK

## Summary

Hands-on technical leader with over twenty years of experience, practising agile software development, ensuring Continuous Delivery of Clean Code. Accomplished and certified Cloud Solutions Architect (ex-Amazon)

## Skills, Domains, and Roles

- Test-Driven Development with Java, Python, and Kotlin
- Data engineering with SQL, fastapi, pydantic, polars, Apache Iceberg, Lambda, ECS
- Creating data platforms with microservices using Spring/JVM on Kubernetes, CI & CD
- Expert knowledge of cloud: 5x AWS certified
- Event-driven architecture with SQS, Kafka, EventBridge
- Infrastructure-as-Code with terraform, CloudFormation
- Data persistence: SQL with relational databases; NoSQL with DynamoDB (expert), MongoDB
- Business domains: financial services, journal publishing, universities/museums
- Roles: developer, sysadmin, tech lead, architect, business analyst, salesperson, and director

## Career Outline

- Data Architect, Ashmolean Museum, Oxford University, August 2023 till date
- Senior Principal Engineer, Elsevier, 2018 to 2023
- Solutions Architect, Amazon Web Services, 2015 to 2018
- Tech Lead, Equal Experts, 2012 to 2015
- Director, Intellect/ISTPL, 2010 to 2012
- CTO, Rang De, 2009-10
- Manager, Mphasis/EDS, 2008
- Lead Consultant, Cap Gemini, 2004 to 2007
- Assistant Project Manager, Blue Star Infotech, 2002 to 2004
- Senior Manager, Ways India Limited, 1999 to 2002

## Project Experience

Data Architect, Ashmolean, Oxford University, August 2023 till date (part-time)

- Identified limitations in architecture, proposed architectural standards and plan to meet business needs (by scaling up data access), implementing the same
- Bootstrapped services for data analysis: copyright, responsive updates
- Ensured repeatable and predictable operations of software to determine quality of information in Museum collections (ported to ECS, scheduled using Step Functions)
- Introduced and ratified as team standard the use of modern software engineering practices, with version control, PRs, CI pipelines (Azure DevOps), code quality scans, deploying to AWS

## Senior Principal Engineer, Elsevier; May 2018 to October 2023

- Enabled user administration in Funding Data Manager (FDM) with standards-compliant authorisation (JWT claims) for front-ends and microservices
- Improved developer experience on Research Data Platform (RDP) with self-service administration of topics and schemas on Confluent Cloud Kafka
- Led delivery of Human-in-loop (on RDP) to augment inferences from machine learning
- Delivered [CRediT](#) on Production Process Evolution (PPE) using event-driven serverless architecture with S3, SQS, and Lambda
- Improved Continuous Delivery (on PPE) including infrastructure provisioning for microservices; led migration of version control at scale (200+ repos) to Github
- Enabled significant (12 of 30+) microservices on Virtual Total Warehouse (VTW) to scale to billions of requests by moving to containers, accelerated releases with Continuous Delivery

## Solutions Architect, Amazon (AWS); December 2015 to May 2018

- Enabled diverse customers (startups, SMBs, enterprises, partners, SIs, ISVs) to make the most of cloud, with effective architecture recommendations
- Engaged with service teams to fulfil customer feature requests and operational needs
- Delivered deep-dive technical workshops, training, and PoCs for customers
- Presented to public audiences at multiple events (as Amazon “PR certified” speaker)
- “Invent and simplify” efforts (for e.g., prototype [Storage Gateway appliance](#))

## Tech Lead, Equal Experts; 2012 August to 2015 November

- Part of team that created and ran “Storeroom” Big Data analytics and messaging solution for mobile app O2 Priority Moments (Scala, Hadoop on EC2, Oozie, Yarn, MySQL)
- Led adoption of cloud services for multiple products (Giftbak app, Qokoon)

## Director, ISTPL Intellectap; 2010 June to 2012 July

- Led software development team (of 5) for Mostfit (the first ever cloud-hosted open-source MIS for microfinance). Undertook major refactoring effort to mitigate product technical debt, and mentored team on enhancements and customer onboarding
- (As Product Manager) envisioned and created product roadmap, and led feature roll-out.

(Earlier career experience available on request)

## Education

- Master of Management, Shailesh J. Mehta School of Management, IIT Bombay
- B. Tech., Mechanical Engineering, Mahatma Gandhi University, Kottayam

## Further information

Technical certifications, links to GitHub, writing, and other contributions are listed on [my website](#)