

Mayank Chugh

Visionary Data Scientist & Generative AI Engineer, Enterprise Architect | Driving Strategic Innovation, Cloud Governance, Integration & Digital Transformation for Global Enterprises

A tech-savvy, self-motivated and competent professional with over two decades of pioneering experience in strategic IT (Information Technology) leadership, AI/ML, cloud migration/integration, solution architecture & development, and technical project management within global enterprises, aiming to leverage expertise in driving transformative initiatives and fostering innovation. Seeking career advancement with an esteemed organization to leverage my expertise in the IT arena for steering transformative initiatives, performance-optimizing operational efficiency, and aligning technology frameworks with business objectives, thereby contributing to organisational growth and success.

✉ mayankchugh.jobathk@gmail.com

📍 Hong Kong, SAR

🌐 github.com/mayankchugh-learning

☎ +852 – 84812040

🌐 [linkedin.com/in/mchugh77](https://www.linkedin.com/in/mchugh77)

📺 <https://www.youtube.com/@itaienthusiast>

SKILLS

Enterprise Architecture

Solution Architecture (API+Cloud)

Service Delivery Management

Cloud Governance

SDLC

Custom Software Engineering and Database Design

Project Lifecycle Management

Internal & External Stakeholder Management

Requirements Analysis

Vendor Management

Product Development

Release Management

Project Scheduling & Budgeting

Business Analysis

Quality Standards and Continue Improvement Plan

Technical Documentation

Team Management

Technical Project Management

On-premise Data Centre to Cloud Migration/Integration

TECHNICAL SKILLS

Languages:	Python, Java / J2EE, EJB, Spring Boot, JavaScript, Struts 1.x MVC, PL/SQL	Databases:	Oracle, MySQL, Postgres, DynamoDB, MongoDB, NoSQL
Reporting:	iReport, Jasper Report	Version Control:	GIT, SVN
Web Services:	Soap, Rest API Development, Swagger API	Management Tool:	Confluence, Service Now, Jira, Maximo, Bugzilla
Operating Systems:	Windows (XP, 10), Linux and Ubuntu	Methodologies:	Iterative, Agile, Waterfall
Cloud Services:	Azure VM, Azure DB, Azure Functions Azure Storage, AWS EC2, ELB, EBS, S3, VPC, SQS, SES, SNS, IAM, RDS, Cloud Watch, Cloud Front, CLI, IOT, MQTT (pub/sub)	MLOps / DevOps:	GIT, Jenkins, Azure DevOps, AWS CI/CD pipeline, dockers, Ansible, AWS ECS and EKS cluster, Kubernetes(K8S), Terraform, Azure AI
Machine Learning:	Supervised, Un-Supervised, Reinforcement Learning, Generative AI, Prompt Engineering, Supervised, LLM, OpenAI, Langchain, Hugging Face, Unsupervised & Reinforcing Learning, NLP, Deep learning, TensorFlow	Productivity tools:	SharePoint, Office, Word, Excel, PowerPoint
		IDE	Visual Studio code, Jupyter Notebook, Google Colab, Eclipse, IntelliJ, Notepad++,

KEY STRENGTHS

Strategic Architectural Vision: I have demonstrated expertise in devising and executing strategy/strategic architectural direction for initiatives, ensuring alignment with business objectives. I am proficient in developing and maintaining enterprise-wide architecture repositories, making informed decisions that optimise operations and drive business growth.

Technical Expertise and Continuous Improvement: Possesses a broad spectrum of technical skills encompassing software development, database design, cloud governance, cloud services, and DevOps methodologies. Strongly committed to ensuring quality standards, leveraging advanced tools, and continuously improving architectural processes to drive efficiency and innovation. Identify opportunities for process improvement and recommend solutions.

Artificial Intelligence & Machine Learning Algorithms, Data Modelling, Data Strategy, and Initiatives: I have experience performing EDA using Jupyter Notebook Google Colab for advanced machine learning (ML) algorithms or data modelling techniques. I Generate Data pipelines such as data ingestion, data validation, Model training, Model evaluation, and Model Pusher. I continuously update repository configuration examples, such as GitHub. I have used all the industry's best practice strategies for data cleaning, training, and exploring new data initiatives, which are considered for long-term growth.

Cloud Migration and Solution Design Proficiency: Extensive experience and subject matter expertise in cloud migration & AI/ML model deployment strategies, contributing significantly to successful migrations and cloud-based solution architectures. Proven track record as a cloud migration expert, contributing to successful migrations to AWS and Azure. Skilled in designing scalable frameworks and integrating diverse systems to meet evolving business needs effectively as per market standards.

Effective Leadership and Collaboration: I have a proven ability to collaborate, lead, and motivate cross-functional teams, fostering collaboration and synergy to achieve architectural objectives. My strong communication skills allow me to provide clear guidance to stakeholders and team members, ensuring seamless project execution and achieving architectural goals.

Solution Design and Development: Strong capabilities in designing and implementing scalable architecture frameworks. Adept at leading transformations and offering cost-effective solutions for mobile app development, ensuring efficient infrastructure and application designs.

Project Management/ Service Delivery Excellence: I have strong project management/Service Delivery skills, emphasising delivering projects within scope, timeline, and budget. I am proficient in executing project plans, leading end-to-end digital transformations, managing multimillion-dollar accounts, challenging the status quo, and overseeing release management throughout the software development lifecycle.

Machine Learning Algorithms, Data Modelling, Data Strategy, and Initiatives: I have experience performing EDA using Jupyter Notebook Google Colab for advanced machine learning (ML) algorithms or data modelling techniques. I Generate Data pipelines such as data ingestion, data validation, Model training, Model evaluation, and Model Pusher. I continuously update repository configuration examples, such as GitHub. I have used all the industry's best practice strategies for data cleaning, training, and exploring new data initiatives, which are considered for long-term growth.

WORK EXPERIENCE

Self Learning

01/2024 – to-date,

- **Skill Upgradation:** I have actively dedicated my time to upgrading my skills in Generative AI, focusing on mastering Large Language Models such as Open AI, Llama, Huggingface, and Prompt Engineering, as well as vector databases like Chroma DB, Pinecone, and Weivaite. Furthermore, I have also gained proficiency in implementing Retrieval Augmented Generation (RAG) applications.
- **Project Experience:** I have completed multiple end-to-end projects within the realm of Generative AI, RAG, and MLOps. These projects encompass ML Model prediction, Deep Learning for object detection, Computer Vision, NER-based applications, and the effective implementation of RAG techniques. The hands-on experience gained from these projects has further solidified my expertise in these domains.
- **Knowledge Sharing:** I am passionate about sharing knowledge and frequently contribute to the AI community. To this end, I have generated and uploaded informative and educational videos on my YouTube channel, covering various topics related to Generative AI, RAG, and my projects. Additionally, I actively engage with professionals on LinkedIn, sharing my insights and expertise in the field. Furthermore, I maintain a dedicated GitHub repository, showcasing my code contributions and projects.
- **Developing Analytical Solutions:** I worked on many POCs/Project development to improve my business analytical and scientific solutions to address business challenges. I worked on many ML algorithms during development to improve model accuracy and actionable insights.
- **Cloud Data Platforms and Insights Extraction:** I have used GitHub Action, Jenkins and Circle CICD on GCP and AWS cloud for deployment for Data Science Applications, POCs and Projects.
- Overall, I have dedicated myself to skill upgradation, extensive project experience in Generative AI, RAG, and MLOps. My commitment to knowledge sharing through educational videos demonstrate my strong background and passion for these fields.

Enterprise Architect | Solution Architect

Capgemini, Hong Kong

10/2021 – 12/2023,

- **Transformed Operational Excellence:** Revolutionized and spearheaded the evaluation and enhancement of internal functions and business development and deployment strategies, leveraging visionary insights to propel efficiency improvements and optimise operational processes at Capgemini.
- **Governance and Architecture Review:** I led Architecture Review Board (ARB) meetings, ensuring alignment with architectural standards. I also maintained the Enterprise Architecture repository with detailed records and actively participated in Change Advisory Board (CAB) sessions for compliance assessment.
- **Strategic Implementation:** I participated in developing the roadmap and strategy for long-term business goals. I implemented architectural enhancements using technical, analytical, and project management expertise, fostering cross-functional teamwork to accomplish architectural objectives effectively.
- **IT Integration and Synergy:** I contributed to the development and execution of IT integration strategies, enhanced the existing infrastructure through synergistic collaborations, and efficiently managed Scrum teams.
- **Data Migration Expertise:** Orchestrated seamless Qlik Replicate data migration from on-premise infrastructure D365 to Azure DB, enabling streamlined Power BI integration for comprehensive data reporting.
- **Modelling and Documentation Mastery:** I have proficiently used model techniques and graphical representations to communicate architectural concepts effectively through compelling presentations, Confluence documentation, and graphical tools like Draw.io.
- **Solution Architect Contribution:** Proactively led the development of Robo Digital Advisory for iOS and Android, capturing project requirements and architecting infrastructure and application designs in Confluence while engaging with business leaders, users, and architects.
- **Scalable Solution Architecture Design:** I spearheaded the implementation of a scalable architecture framework aligning business capabilities with IT systems. I notably enhanced data analytics and visualisation capabilities and delivered a cloud application integration layer for a global financial project.
- **Effective Communication and Leadership:** I have demonstrated interpersonal skills and adept communication with stakeholders and team members. I offer clear guidance, inspire team members, and establish best practices, SOPs, and monitoring techniques.
- **Cloud Migration Expertise:** I acted as a subject matter expert in cloud migration from an on-premise data centre, contributing to multiple pre-sales assignments by offering approaches for highly available, fault-tolerant, and resilient applications. I successfully migrated a Lift-and-Shift Monolithic application, including VM and RDS server migration to AWS for a Java + Oracle RDS application, defining disaster recovery RTOs and RPOs for the client.
- **Azure Cloud Services Proficiency:** I have extensive experience in software development and expertise in Java and cloud technologies such as Azure Functions, Azure Blob Storage, and DB. I have successfully delivered scalable and efficient solutions, leveraging Azure Virtual Machines, Networking, VPCDB, and Azure App Service while collaborating with cross-functional teams and following agile methodologies.

Cloud Application Manager Architect

Deloitte, Hong Kong

03/2022 – 08/2022,

- **Engagement in Pre-sales Activity:** I was actively engaged in pre-sales activities, collaborating with clients to provide them with comprehensive solutions, specifically focusing on high availability, fault tolerance, and resilience for their applications.
- **Specialized Contribution as Azure Cloud SME:** I specialise in providing cloud governance. Hence, I am the subject matter expert of the Azure Cloud team, with a primary focus on application implementation. I have defined and implemented robust DevOps strategies while meticulously accepting and aligning Service Level Agreements (SLA), Recovery Point Objectives (RPO), and Recovery Time Objectives (RTO).
- **Architectural Solution Development:** Took a holistic approach to architectural solution development, actively collaborating with cross-functional teams to design and implement cloud-based solutions that met client requirements and adhered to industry best practices.

Senior Technical Architect/ Project Manager

Coforge, Hong Kong

05/2004 – 10/2021,

- **Requirements Gathering and Design:** I interacted extensively with application users, conducting meetings and walkthroughs, gathering and designing project requirements and feedback specifications, and creating BRD, FRD, user stories, and mock-ups for customer needs to enhance operational efficiency.
- **Technical Documentation and Response Management:** I have developed over 55 technical responses to Requests for Quotations (RFQs), showcasing my expertise in technical documentation and proposal management. I am open to recommendations, changes, and new business processes.
- **Management of Cloud and On-Premises Activities:** Managed diverse activities, management reports, conducted evaluations and provided timely and accurate tracking of KPIs/SLAs, including Release Management, Backlog grooming session, Sprint Planning, Issues / Incident/problem report/service Management, Change Management and troubleshooting, Service Delivery, and Quality Assurance/Testing for multiple web and mobile applications, providing 2nd and 3rd-level technical support while overseeing both on-site and offshore resources.

- **Strategic Project Management and Prioritization:** Managed project priorities, deadlines, and deliverables across regions, optimising operational efficiency and ensuring alignment with business objectives with a team of four on-site and four offshore resources.
- **End-to-End Digital Transformations:** Led comprehensive digital transformations for iOS and Android mobile app development, providing cost optimisation solutions, infrastructure and application architecture, and maintenance support.
- **Enterprise Architecture Governance:** Conducted governance review meetings with Cathay Management, ensuring compliance with architectural standards and alignment with business objectives.
- **Pre-Sales and Solution Implementation:** Contributed to pre-sales efforts by providing winning solutions, responding to RFPs and RFIs, and overseeing technical realisation by delivery teams, including Proof of Concepts (POCs) for monolithic migrations to the cloud.
- **Software Product Design and Engineering:** I designed and engineered software products, such as migration to AWS S3, implementation of OCR using Azure AI—Computer Vision, and incorporation of AWS IoT for warehouse cargo applications.
- **Data Warehouse Infrastructure Implementation:** We implemented a robust data warehouse infrastructure, integrating multiple data sources and leveraging ETL processes. This infrastructure facilitates advanced analytics and reporting for data-driven decision-making and risk reduction.
- **Management of Revenue Accounts and Software Development Lifecycle:** Managed multimillion-dollar revenue accounts and releases throughout the software development lifecycle, conducted QA and UAT, and collaborated and communicated closely with customers, internal staff, and stakeholders for system-oriented projects. Developed RESTful APIs for interface integration with HKIA and spearheaded infrastructure, application, release, configuration, migration, identity and access with Outh-2, and process management aligned with the release calendar.

WORK EXPERIENCE

Software Developer

Layer 3 Technologies, New Delhi

08/2003 - 04/2004,

- **Production Support and Enhancements:** As a key contributor to the software development life cycle (SDLC) at Layer 3 Technologies, I delivered production support, major and minor enhancements (20+), and bug fixes (500+).
- **System Design for User Productivity:** Designed and developed forward-thinking systems (100+ pages) to enhance user productivity and address their needs, demonstrating a proactive approach to system architecture.

CAREER TIMELINE

Company: Capgemini, Hong Kong

- Client: CHANEL., Hong Kong | Designation: Enterprise Architect | Duration: Oct '23–Dec'23 (payroll managed by eTeams)
- Client: HSBC., Hong Kong | Designation: Cloud / Solution Architect | Duration: Sep '22–Aug'23
- Client: HSBC., Hong Kong - Designation: Cloud / Solution Architect | Duration: Oct '21–Feb'22

Company: Deloitte, Hong Kong

- Client: CHANEL, Hong Kong | Designation: Cloud Application Manager Architect | Duration: Mar '22 – Aug' 22

Company: Coforge, Hong Kong

- Client: Cathay Pacific Cargo Terminal, Hong Kong | Designation: Senior Technical Architect/ Project Manager | Duration: Oct '16 – Oct' 21
- Client: Asia Airfreight Terminal, Hong Kong | Designation: Senior Technical Architect/ Project Manager | Duration: Feb 2014 - Sep 2016
- Client: British Airways, London, UK & New Delhi | Designation: Senior Technical Architect | Duration: Oct 2012 – Jan 2014
- Client: Cathay Pacific Cargo Terminal, Hong Kong | Designation: Technical Analyst / Project Lead. | Duration: Oct 2008 – Sep 2012
- Client: Lehman Brothers, Singapore | Designation: Technical Analyst / Project Lead. | Duration: May 2008 – Sep 2008
- Client: Asia Airfreight Terminal, Hong Kong | Designation: Technical Analyst | Duration: Jan 2006 – Apr 2008
- Client: Marks and Spencer, London | Designation: Technical Analyst / Project Lead. | Duration: May 2004 - Dec 2005

Company: Layer 3 Technologies, New Delhi

- Client: Collin Street Bakery, US

INCA Informatics, New Delhi as Software Developer (02/2003 - 07/2003)

HCL Infosystems Ltd., New Delhi and Mukul Computer Services, India as Technical Customer Support Engineer (08/1997 - 12/2000)

EDUCATION

PG Diploma in AI & ML

Great Learning

11/2021,

PG Diploma Program in Cloud Computing

Great Learning

03/2020,

PG Diploma in Computers Programming

Agra Technical University, India

12/1999,

CERTIFICATIONS

Azure DevOps: AZ 400 (09/2023)

Azure Administrator: AZ 104 (03/2023)

Togaf 9.2 Certified: Enterprise Architect (10/2022)

DevOps Foundation Certified (06/2022)

AWS Certified Solutions Architect – Associate (04/2017)

PRINCE2® Foundation and Practitioner (11/2016)

Sun Certified Java Professional (JDK 1.6) (01/2010)

AI-900 Exam Preparation: Microsoft Azure AI Fundamentals

PG Diploma in Software Development (FSD)

Upgrad, IIIT Bangalore

03/2021,

Masters in Computer Application (Computer Science)

U.P.T.U, India

07/2003,

Bachelor of Arts

Agra University, India

06/1997,

Certified ScrumMaster® (CSM®) (04/2023)

Azure Fundamental: AZ 900 (01/2023)

AWS Certified Cloud Practitioner (08/2022)

HashiCorp Certified: Terraform Associate (05/2022)

AWS Certified Developer - Associate (06/2017)

PMI Generative AI Overview for Project Managers

PMP Training - Udemy (11/2023)

