

Summary:

I am a strategic and results-oriented leader with 14 years of experience in enterprise solution architecture, end-to-end product development, automation, and AI engineering. Proven ability to lead cross-functional teams in designing and deploying complex, scalable systems that integrate advanced AI/ML capabilities to solve critical business challenges. Currently a Manager at Novartis, adept at translating complex business requirements into robust technical solutions and mentoring teams to drive innovation and efficiency. I possess a master's degree in data science.

Core Competencies:

| Solution & Enterprise Architecture | Data & Product Management | AI/ML & Data Science | Leadership & Strategy |
|------------------------------------|--|--|--------------------------------|
| System Architecture Design | Prototyping & End-to-End Application Dev | Generative AI Workflows | Technical Leadership |
| Microservices Architecture | Data Pipeline Development | Large Language Models (LLMs), AI Agent | Cross-Functional Collaboration |
| Scalability & Performance Opt. | Python, C#, JS, SQL | Predictive & Statistical Modeling | Stakeholder Engagement |
| Integration Patterns | Data Platforms, ETL, Power BI | Machine Learning (PyTorch, Scikit) | Agile Methodologies (Scrum) |
| Technology Strategy & Road mapping | RESTful APIs & Distributed Systems | AI-Driven Automation | Team Mentoring & Development |

Industry Experience:

NOVARTIS | MANAGER | OCT 2021 – CURRENT

As a Manager within Novartis, I lead teams in architecting and delivering high-impact data and AI solutions that align with strategic business objectives.

Prototyping & End-to-End Product Building:

- ◆ Architected and led the development of centralized Knowledge Management platforms for innovative medicines, designing microservice-based systems to ensure scalability and performance. This initiative aligns with the principles of creating comprehensive solution blueprints for enterprise environments. The platforms are used by thousands of Novartis employees daily. [[go/NKCPortal-Metric](#)]
- ◆ Achieved a 50% performance enhancement through strategic optimization, system redesign, and cross-team management, demonstrating a focus on creating efficient, enterprise-scale systems.
- ◆ End-to-end development of a molecule project to validate the chemical naming process. [[go/chemicalname](#)]

Business & Technical Leadership:

- ◆ I serve as the primary owner of the NKC enterprise and Opt-in solutions, providing ongoing guidance and mentorship to NKC internal team members, including senior technical and business managers. I regularly deliver tailored business and technical solutions and proactively resolve critical challenges reported by the team. [[go/NKC](#)]
- ◆ NKC Portal 2 is currently the highest priority initiative for NKC, structured across multiple workstreams. Having supported the main Portal application for the past several years, I contribute essential ideas and system insights to the Portal 2 upgrade, leveraging my in-depth knowledge of the existing system. [[go/NMH-Dashboard](#)]
- ◆ I work in close collaboration with SteerCo team members to translate complex business requirements into effective, actionable solutions.
- ◆ I worked collaboratively with the DDIT procurement and cloud infrastructure teams to implement a security vulnerability management system, resulting in a 60% improvement within one year.
- ◆ I provide strategic guidance to the technical, cloud, and DDIT teams, ensuring that our designs and scalable solutions consistently align with overarching business objectives.

AI Engineering and Automation:

- ◆ Over the past four years, I have developed the highest number of unique, innovative e-Library solutions and proofs of concept relevant to business needs.
- ◆ Built the AI Assistant Chat App (POC) in 2023, showcasing the capabilities of large language models (LLMs) at a time when the internal ChatGPT tool was unavailable.
- ◆ I secured second place in the AI Innovation 2025 Challenge.
- ◆ I created a Machine Learning model to reduce human effort by 40% in predictive literature search.

PLANET PAYMENT GROUP HOLDINGS LT | APPLICATION DEVELOPER | NOV 2018 – OCT 2021

Distributed Backend Payment System Design and Development:

- ◆ Situation: Tasked with addressing the demands of a rapidly growing payment platform that required processing between 60,000 and 150,000 transactions daily across diverse business channels.
- ◆ Task: Lead the design and development of robust, distributed backend systems to ensure reliable, scalable, and high-performance transaction processing.
- ◆ Action: Spearheaded the end-to-end architecture and implementation of three core systems: currency conversion, merchant transaction processing, and card transaction management. Leveraged distributed system principles, optimized data flows, and ensured seamless integration for each subsystem to deliver operational efficiency and resilience.
- ◆ Result: Successfully enabled the platform to accommodate high transaction volumes with enhanced reliability and scalability, supporting business growth and improving overall system performance.

Redesigned System Architecture for Enterprise Scalability:

- ◆ Led the re-architecture of core digital payment systems by implementing a distributed systems approach and optimizing database performance to address scalability challenges.
- ◆ Result: Improved application response time by 60% and increased user capacity by 55%, ensuring the platform could support long-term organizational goals.

Achievement:

- ◆ Worked as a technical lead for various critical systems.

HCL TECHNOLOGIES LTD (INTEL INDIA) | TECHNICAL LEAD | MAY 2016 – AUG 2017

Led Solution Architecture for Intel's Global E-commerce Platform:

- ◆ Directed the technical design and solution architecture for the modernization of Intel's global e-commerce site, focusing on scalability, customer experience, and business growth. [https://www.intel.com]
- ◆ Designed and implemented a resilient, scalable microservices architecture to handle high traffic volumes and complex business logic.
- ◆ Result: The successful launch resulted in a 35% increase in online traffic in the first quarter, demonstrating the ability to design and deliver high-value enterprise systems.

Achievement:

- ◆ Received "HCL Spot Award" for contribution to the development and project management work.

COGNIZANT TECHNOLOGY SOLUTIONS |ASSOCIATE-PROJECTS | JAN 2011 – OCT 2015

Security Management System & Risk Analysis:

- ◆ Worked on a financial security system and built features as per business requirements. Translated business requirements and mathematical derivations into technical implementations.

Achievement:

Received "Dream-team Award" twice for contributions to design and development.

Education

Master of Science in Data Science & Analytic | Maynooth University | Sep 2017 – Aug 2018

B. Tech in Electronics & Communication | WBUT University | Aug 2006 – Aug 2010

Interests

- ◆ Music, Tutoring & mentoring (Mathematics, programming) students (FirstTutor.com), Exploring countries & people.