
Summary:

Principal Engineer with **10+** years of experience building **customer-centric products** and validating large-scale distributed, graphical, and embedded systems across storage, aerospace, travel, and telecom. Proven at architecting scalable validation frameworks, improving engineering efficiency (up to **40%**), and leading cross-functional teams to deliver **130+** enterprise releases at SanDisk, Amadeus, and Honeywell.

Skills:

Systems & Architecture: Distributed Systems, Domain-Driven-Design, Microservices, System-Design, Cloud Computing (Azure)

Core Languages & Frameworks: Python, C++, C, Pytest, Transformers(Model Definition), Scikit-learn & Torch (ML/DL), Qt (GUI)

Protocols & Low-Level Systems: SCSI, USB

DevOps & Tooling: CI/CD, Jenkins, Kubernetes, REST, SOAP, Visual Studio Code, draw.io

Leadership: Technical Mentoring, Cross-team Workflow Reviews, Stakeholder Alignment

Professional Experience:

SanDisk

Bangalore

Principal Engineer

Nov 2024 - Aug 2025

- Reconstructed a **4-layer data** storage validation workflow using Domain-Driven Design (event storming, bounded context), reducing cognitive load for new engineers and improving validation accuracy, contributing to a **5%** faster onboarding and iterative cycle.
- Directed & engineered USB-Apple powered communication API flow of multi-layered code using Python and C++, enabling non-native USB communications to Apple devices using **2** mediums such as CiDER and CP210 boards, serialising communications by **60%**.
- Led platform-wide analysis of **10+** flash domain services across SCSI and NVMe, unblocking **30+** validation bottlenecks and influencing **~30%** of the product roadmap.

Amadeus

Bangalore, London

Software Development Engineer 3

Jan 2022 - Sep 2024

- Spearheaded **data migration** for **4** global airlines, introducing Python scripts to meet airline-specific requirements, improving migration error handling by **5%**, and reducing downtime by **70%**.
- Evolved as a full-stack engineer, enhancing the migration project in **2** systems using Python and C++, identifying **2** patterns such as singleton, facade, etc., validating relevant changes using **2 NodeJS** desktop applications, covering **2** security audits.

Honeywell

Bangalore, Hyderabad

Embedded Engineer II / Software Engineer II / Software Engineer

Jan 2018 - Dec 2021

- Incorporated **15** middleware **data services** (including **5** client-specific services using SOAP) for **3** types of surveillance camera models in C++, coordinating with **2** cross-functional (offsite & onsite) teams, maintaining scalability, resulting in first-class camera firmware delivery for **5 customers**.
- Enhanced a **4-tabbed aircraft data** loader GUI application in C++ with **40** bench tests, resolving **200** Jira stories/issues, supporting **80** subsequent deliveries to **4 customers**, and improving **data** loading on aircraft systems by **60%**.
- Leveraged object-oriented programming skills, adhering to **5** coding principles, following **3** design and **1** architectural patterns, such as abstract factory, MVC, multi-layered architecture, etc.

Tata Consultancy & Services

Hyderabad

Software Engineer

Feb 2017 - Dec 2017

- Customised Billing System for **4-5 client-specific** needs, ensuring smooth operations for enterprise telecom **customers**, delivering **4** projects on time.

MagnaQuest

Hyderabad

Software Engineer

Jun 2015 - Feb 2017

- Implemented **2-3** standalone Windows applications, creating certificates to perform **3** cryptographic operations for a **customer**.
 - Ported proprietary library code from Windows to the Linux platform, following a monolithic architecture, enabling **6** cryptographic operations for a standard **customer** in the Linux platform.
 - Explored and designed a **User Interface** as an MVP, reading **3** types of smart card information for representing results **graphically** to a team of **15-20**, and then to a **client**.
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Contributions & Projects:

- Cab Sharing System with visuals — [System-Design-Masterclass](#) | Open Source Contribution
 - AI Explorer — [A desktop application that illustrates AI Concepts](#), Try A Template — [A graphical representation of CS Concepts](#) | Custom Projects
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Recognition & Impact:

- Multiple engineering excellence awards across Amadeus, Honeywell, and TCS for system reliability, delivery ownership, and cross-team leadership.
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Education:

Jawaharlal Nehru Technological University, Bachelor's in Computer Science

June 2009 - April 2013