

## Contact

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(LinkedIn)

## Top Skills

Cloud Solution Architecture (AWS, Azure, GCP)

System Design & Distributed Systems

Emerging Technologies (Generative AI, Quantum)

## Languages

Tamil (Native or Bilingual)

English (Native or Bilingual)

Hindi (Elementary)

## Certifications

AZ-301 Microsoft Azure Architect Design

AZ-300 Microsoft Azure Architect Technologies

Certified SAFe® 5 Product Owner/ Product Manager

Microsoft Certified: Azure Solutions Architect Expert

AWS Certified Solutions Architect – Professional

## Honors-Awards

Consulting Associate of the year 2021

Spot Award 2022

# Nagarjun Rajendran

Principal Cloud Architect | Large-Scale Distributed Systems | Cloud,

IoT & Generative AI | Technical Leadership

Greater Chicago Area

## Summary

I am a Principal Cloud Architect working on large-scale systems across cloud, IoT, and enterprise platforms.

My background spans embedded software, IoT platforms scaled to 100K+ devices, and cloud architectures used across regions. Today, I own architecture decisions, guide multiple engineering teams, and act as a technical escalation point for complex system design challenges. I do not manage a people team, but I lead through architecture ownership and technical decision making.

At Bosch, I work on enterprise cloud platforms and GenAI initiatives. I have architected GenAI pilots grounded in structured enterprise data, with a strong focus on accuracy, governance, and operational realities rather than demos. I also act as a Technical Product Owner for selected platforms, defining technical scope and architecture direction.

I hold a Master's degree in Electrical Engineering from the National University of Singapore, with a specialization in microelectronics that provides a strong foundation in quantum fundamentals. I am currently applying a practical, systems-oriented lens to quantum computing, focusing on feasibility and enterprise relevance.

I share learnings on system design, architecture tradeoffs, and emerging technologies from a practitioner's perspective.

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## Experience

Bosch Digital

Cloud and Technology Solutions Manager (Principal Cloud Architect / Technical Product Owner)

January 2023 - Present (3 years 1 month)

United States

- Own end-to-end architecture for enterprise cloud and distributed systems used across multiple internal teams, supporting daily usage by hundreds of internal users
- Act as Technical Product Owner for selected platforms, defining technical scope, architecture roadmap, and acceptance criteria
- Lead architecture reviews and guide 3–5 engineering teams on scalability, reliability, security, and cost tradeoffs
- Serve as technical escalation point for cross-team issues involving cloud networking, identity, security, and platform integration, reducing resolution time from weeks to days
- Evaluate emerging technologies, including Generative AI and quantum computing, translating research and industry trends into architectural guidance and exploratory pilots
  
- ◆ GenerativeAI Initiatives
- Architected enterprise GenAI assistants enabling natural language access to structured product and lifecycle data
- Designed GenAI systems grounded in knowledge graphs and authoritative data sources
- Built AI-driven platforms for project maturity assessment and risk visibility
- Reduced manual review and reporting effort by approximately 30–40 percent during pilots
  
- ◆ Quantum Focus (Exploratory)
- Applied academic foundations in microelectronics and quantum fundamentals
- Evaluated quantum algorithms and software ecosystems from a systems perspective
- Contributed to internal guidance on enterprise feasibility

Bosch.IO

Senior Cloud & IoT Architect

January 2020 - December 2022 (3 years)

Singapore

- Led solution and system architecture for cloud and IoT platforms supporting industrial and enterprise use cases
- Architected Azure-based IoT platforms designed to scale beyond 100,000 connected devices, handling millions of telemetry messages per day
- Designed multi-region cloud, networking, and security architectures supporting availability targets above 99.9 percent

- Guided engineering teams on scalability, reliability, security, and cost tradeoffs without formal people management
- Acted as technical authority for architecture decisions and complex customer scenarios

### Bosch ASEAN

IoT Technology and Business Consultant  
August 2017 - December 2019 (2 years 5 months)  
Singapore

- Worked as a customer-facing IoT consultant, bridging business requirements and technical system design
  - Defined IoT solution architectures covering devices, connectivity, cloud ingestion, and data processing
  - Supported customers across the ASEAN region in evaluating IoT feasibility, platform choices, and rollout strategies
  - Translated business problems into technical solution designs and implementation roadmaps
- ◆ Intrapreneurship / Startup Founder (Within Bosch)
- Co-founded an internal startup as part of Bosch's intrapreneurship program
  - Took an IoT-based product from concept to prototype and customer validation
  - Defined end-to-end technical architecture spanning devices, gateways, cloud backend, and data pipelines
  - Worked across business, engineering, and customer stakeholders to validate technical and commercial feasibility

### Continental

Embedded Software Engineer  
September 2015 - August 2017 (2 years)  
Singapore

- Developed production embedded software in C and C++ for automotive systems
- Built automated test and validation frameworks reducing test cycles from 3–4 days to under 5 minutes
- Worked closely with hardware and systems teams to debug and optimize performance-critical components

### Pirate3D

Embedded Software Engineer  
May 2014 - August 2015 (1 year 4 months)

Singapore

- Developed firmware and low-level software for consumer hardware products
- Worked on hardware bring-up, device drivers, and system integration

Broadcom Limited

IC Design Intern

July 2013 - December 2013 (6 months)

Singapore

- Worked on low-level engineering problems in a semiconductor engineering environment
- Gained exposure to hardware-software interaction and system-level debugging

Tata Consultancy Services

Assistant Systems Engineer

November 2011 - June 2012 (8 months)

Chennai Area, India

- Worked as a software engineer supporting enterprise and technology clients
- Contributed to application development, testing, and production support
- Built early professional experience in structured software delivery and stakeholder communication

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## Education

University of California, Berkeley, Haas School of Business

Distance Learning - UC Berkeley Executive Education (Startup Acceleration Group), Business; Startup

National University of Singapore

Master of Science (M.S.), Semiconductor Fundamentals and Microelectronics

Anna University

Bachelor of Engineering (B.E.), Electronics and Communication Engineering