Kumar Muthuswamy

CLOUD NETWORKING & DATA CENTER TECHNOLOGY LEADER | SOLUTIONS ARCHITECTURE | TECHNICAL SALES | PRODUCT STRATEGY

+91-7777026329 | kmuthu1@outlook.com | Bengaluru, India
LinkedIn | GitHub | Website

Bridging technology strategy and business outcomes through enterprise & Data Center solutions architecture, multi-cloud transformation, strategic customer engagement, and AI-driven innovation.

Core Competencies

- Data Driven Product Strategy & Technology Roadmapping
- AI-Native Innovation & Intelligent Automation
- Technical Sales & Strategic Solution Consulting
- Executive Stakeholder Management & Advisory
- Multi-Cloud & Hybrid-Cloud Strategy
- Enterprise & Data Center Solutions Architecture
- Cloud Networking & Infrastructure Modernization
- Strategic Account Management & Customer Engagement
- Cross-Functional Technology Leadership
- Network & Cloud Security Transformation

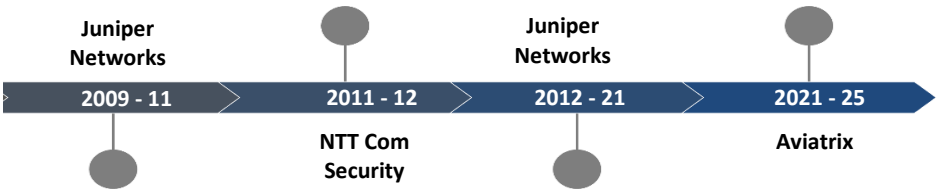
Technical Skills

- **Cloud & Data Center Architecture:** AWS, Microsoft Azure, Google Cloud Platform (GCP), Multi-Cloud & Hybrid-Cloud Architecture, Data Center Architecture, Virtualization, Linux
- **Cloud Networking & Connectivity:** VPC/VNet, Transit Gateway (TGW), Azure Virtual WAN (vWAN), Virtual Gateway (VGW), Route Server, Cloud Router, NAT Gateway, AWS Direct Connect, Azure ExpressRoute, Cloud Interconnect, Application Load Balancer (ALB), Network Load Balancer (NLB), Gateway Load Balancer (GWLB), CloudFront, Azure Front Door, Private Link, DNS, Route 53
- **Network Architecture & Protocols:** BGP, MP-BGP, OSPF, IS-IS, MPLS, VPLS, EVPN, VXLAN, L2/L3 VPNs, IPv6, TCP/IP, DNS, GRE, UDP, VRRP, MC-LAG, NetFlow, IPFIX
- **Network Security & Zero Trust:** IPsec, Stateful Firewalls, NGFW, Web Application Firewall (WAF), Juniper vSRX, Layer 7 & FQDN Filtering, DDoS Mitigation, BGP FlowSpec, IAM, PKI, TLS/HTTPS, DNSSEC, OAuth 2.0, SAML, SPIFFE/SPIRE, Aviatrix FireNet, Linux Firewalls, iptables, ZTNA, SASE
- **Cloud & Networking Platforms:** Aviatrix, Juniper Networks, Cisco, Palo Alto Networks
- **Network Automation & Infrastructure as Code:** Python, Terraform, Ansible, Pulumi,

Profile Summary

- **Cloud Networking & Technology Leader:** 15+ years of experience across Enterprise, data centers solutions architecture, multi-cloud strategy, network security, infrastructure modernization, and technology transformation
- Strong background in **solutions architecture, technical sales, and strategic customer advisory**, translating enterprise requirements into business-aligned solutions, influencing executive stakeholders, and supporting high-value sales opportunities
- Demonstrated commercial impact by delivering $**250 million multi-year RFP winning proposal** and exceeded sales performance by 600% projections, combining technical expertise with customer engagement and solution-led selling
- Experienced in **cross-functional technology leadership, product and engineering collaboration, customer-driven solution strategy, and executive stakeholder management**, aligning enterprise requirements, competitive positioning, and technical capabilities with business priorities
- Combines deep cloud (AWS, GCP, Azure) and data networking expertise with commercial **acumen, consultative selling, and proactive problem-solving**, translating complex technical requirements into differentiated solutions that strengthen customer value and business outcomes.
- Implemented an AI-powered support chatbot that reduced support tickets by 10% and contributed to a 90% success rate in seamless upgrades, while advancing Agentic AI applications for intelligent network operations & infrastructure automation.

Career Timeline



Notable Accomplishments

- **$250M Multi-Year RFP Win:** Contributed differentiated network architecture and solution positioning, leveraging MX router node-slicing capabilities to address next-generation edge network requirements and reduce customer costs.
- **600% Above Sales Projections:** Exceeded sales projections through strategic customer engagement and collaboration with customer architecture, implementation, engineering, and product teams.
- **Improvement in Deal Conversion:** Influenced enterprise cloud networking opportunities through customer-specific architectures and differentiated Proof-of-Concept (POC) solutions.
- **OPEX Savings:** Designed VPLS-to-EVPN-MPLS migration strategies for global edge networks, evaluating next-generation service-edge architectures.
- **90% Seamless Upgrade Success:** Led an upgrade transformation initiative at Aviatrix, improving upgrade reliability and customer experience.

Shell Scripting, NETCONF, YANG, gNMI, gRPC, Git, GitHub

- **Observability & Data Analytics:** Prometheus, Grafana, ELK Stack, SQL, Pandas, Matplotlib, MQTT, Network Telemetry
- **Containers & Cloud-Native Technologies:** Kubernetes, Docker, eBPF, Cloud-Native Networking
- **AI, GenAI & Emerging Technologies:** LLMs, Agentic AI, Retrieval-Augmented Generation (RAG), LangChain, CrewAI, Model Context Protocol (MCP), Prompt Engineering, Context Engineering, Vector Databases, AI/ML, Harness Engineering

Certifications

- Aviatrix Certified Engineer — Multi-Cloud Networking Professional | Oct 2021
- ACE Multi-Cloud Networking Associate | Oct 2021
- Build with Andrew — DeepLearning.AI | Aug 2026
- AI Prompting for Everyone — DeepLearning.AI | Aug 2026
- Uplevel AI Lite — Interview Kickstart | Aug 2025
- Hands-on AI Masterclass I: Fundamentals — You.com | Mar 2025
- HashiCorp Certified: Terraform *(Expired)* | Jun 2021
- Juniper Networks Certified Specialist (JNCIS-SEC) *(Expired)* | Dec 2011
- Juniper Networks Certified Expert (JNCIE-M) *(Expired)* | Jan 2011
- Cisco Certified Network Associate (CCNA) — Cisco Systems | Dec 2007

Soft Skills

- Strategic Leadership & Decision-Making
- Critical Thinking
- Customer Relationship & Consultative Engagement
- Cross-Functional Team Leadership
- Commercial Acumen
- Strategic Problem-Solving & Innovation

Awards

- CEO Excellence Team Award — Juniper Networks
- Sales and Project Achievements Award — Juniper Networks
- · Customer Satisfaction (CSAT) Award — Juniper Networks (Awarded multiple times)
- Outstanding Academic Achievement Award — George Mason University

Work Experience

Aviatrix | Sr. Principal Cloud Network Engineer | India (Remote) | Oct 2021 – May 2025

- **Multi-Cloud Solutions Architecture:** Architected secure multi-cloud and hybrid connectivity solutions across AWS, Azure, and GCP, leveraging Aviatrix and cloud-native networking & Security capabilities to address enterprise requirements
- **Cloud Security & Migration:** Designed secure cloud migration and egress architectures incorporating distributed Layer 7 filtering to strengthen network security and traffic control
- **AI-Enabled Support Optimization:** Implemented a production AI chatbot, reducing support tickets by 10%, and automated the conversion of customer queries and support tickets into knowledge-base articles to improve knowledge accessibility
- **Agentic AI Innovation:** Designed and presented an Agentic AI solution to executive leadership, identifying opportunities for intelligent automation and AI-enabled network operations
- **Upgrade Transformation:** Led upgrade improvement initiatives, achieving a 90% success rate in seamless upgrades and strengthening system reliability and customer experience.

Juniper Networks (HPE) | Service Manager | India (Remote) | Jun 2020 – Oct 2021

- **Network Operations Leadership:** Oversaw Comcast network operations, coordinating cross-functional teams supporting Juniper QFX switches, MX routers, and PTX routers to maintain service stability and successful implementation of DOCSIS 3.1 architecture
- **Routing Security & Service Delivery:** Directed BGP-RPKI implementation to strengthen route validation and coordinated technical teams to resolve network deployment and operational challenges

Juniper Networks (HPE) | Consulting Systems Engineer | United States (Remote) | Aug 2012 – Sep 2018

- **Enterprise Solutions Architecture & Presales:** Delivered routing, data center, and security architectures for Verizon, presenting technical solutions to network architects, directors, and VPs and supporting a multi-year, multi-million-dollar deal through MX router node-slicing capabilities
- **Sales & Strategic Account Development:** Exceeded sales projections by 600% through customer engagement and collaboration with architecture, implementation, engineering, and product teams; earned two promotions and advanced into lead sales engineering responsibilities
- **Network Transformation & Automation:** Developed VPLS-to-EVPN-MPLS migration strategies for edge networks and advised on network automation and telemetry using YANG, NETCONF, gRPC, MQTT, and OpenDaylight
- **Certification & Cloud Security:** Reduced project certification time by 50% through Agile code delivery and testing during Phase 1 certification; designed and deployed Juniper SRX firewalls for secure cloud interconnectivity

NTT Com Security | Senior Consultant | United States (Remote) | Sep 2011 – Jul 2012

Juniper Networks | Customer-Focused Technical Support Engineer | United States | Jun 2009 – Sep 2011

Education

- Master's in Telecommunications – George Mason University, Fairfax, Virginia, USA | May 2009
- Bachelor's in Electronics – University of Mumbai, Mumbai, India | June 2006