Mokshith Kumar Tumallapalli

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EDUCATION

University of Southern California | Masters in Electrical Engineering (Computer Networks) GPA: 3.5

Bangalore Institute of Technology | B.E. in Electronics and Communication Engineering GPA: 3.7

Graduation: May 2019

Graduation: June 2017

TECHNICAL SKILLS

- Applications: Wireshark, Amazon Web Services (AWS), Opnet-Riverbed Modeler, GNS3, Cisco Packet Tracer
- Protocols & Technologies: TCP/IP, UDP, DNS, DHCP, VPN, VLAN, VTP, 802.1Q, NAT, ACL, OSPF, RIP, EIGRP, BGP, GRE
- Programming Languages & Scripting: C/C++, Python, TypeScript, Bash
- Infrastructure as Code (IaC): Terraform (HCL), AWS CloudFormation, CDK (TypeScript)
- Cloud & DevOps: AWS, Docker, Kubernetes, Git, CI/CD

CERTIFICATIONS

- AWS Certified Advanced Networking Specialty
- AWS Certified Security Specialty
- AWS Certified Solutions Architect Professional
- AWS Certified DevOps Engineer Professional
- AWS Certified SysOps Associate
- AWS Certified Solutions Architect Associate
- AWS Certified Developer Associate
- AWS Certified Cloud Practitioner
- AWS Certified AI Practitioner
- AWS Direct Connect Subject Matter Expert
- Cisco Certified Network Associate (CCNA Routing and Switching)
- Juniper Networks Certified Internet Associate (JNCIA Junos)
- IPv6 Forum Certified Network Engineer (Silver)

EXPERIENCE

Sr. GTM Specialist - Core Networking, Amazon Web Services (AWS), Seattle, WA, US

Oct 2024 - Present

- Led the Go-To-Market strategy for AWS Networking services including Direct Connect, Transit Gateway, Cloud WAN, PrivateLink, and VPC Lattice for ISV customers in North America, driving double-digit YoY service adoption growth.
- Developed scalable sales plays, messaging frameworks, and customer-facing assets to accelerate adoption of core networking services across strategic ISV and FSI accounts.
- Partnered cross-functionally with Sales, Solutions Architects, Product, Marketing, and Partner teams to execute targeted initiatives that simplified cloud connectivity for customers.
- Delivered technical briefings and co-created networking architectures with customer CTOs and engineering leaders, helping ISVs and FSIs modernize hybrid networking and accelerate migrations to AWS.
- Drove regional adoption through partner-led GTM programs by collaborating with top ISV partners and AWS Partner Network (APN) stakeholders to build reference architectures and joint campaigns.
- Synthesized customer feedback into actionable insights and presented them to service teams, influencing roadmap prioritization and feature delivery across key networking services.
- Designed and launched enablement initiatives—including webinars, and internal workshops—equipping 100+ account teams with tools
 to position AWS Networking services effectively.
- Played a key role in new service growth (e.g., VPC Lattice) by shaping positioning, driving early customer trials, and supporting scaled field adoption.
- Mentored new GTM Specialists and field teams, contributed to internal newsletters and best practices, and was recognized for thought leadership in cloud networking adoption.

Sr. Cloud Infrastructure Architect, Amazon Web Services (AWS), Seattle, WA, US

April 2021 – Oct 2024

- Define and deliver technical engagements with partners and customers to help accelerate their cloud adoption journey
- Participating in technical discussions, understanding customer requirements, proposing and delivering packaged offerings, and delivering custom solution engagements
- · Facilitating discussions with senior leadership regarding technical / architectural trade-offs, best practices, and risk mitigation
- Engaging with customers to prove the use of AWS services to support new distributed computing solutions that often span private cloud and public cloud services
- Leading migration of existing applications and development of new applications using AWS cloud services
- Leading highly-available and fault-tolerant enterprise and web-scale software deployment
- Collaborating with AWS engineering and support teams to convey partner and customer needs and feedback as input to technology roadmaps

- Sharing real world implementation challenges and recommend new capabilities that would simplify adoption and drive greater value from use of AWS cloud services
- Responsible for infrastructure automation through DevOps scripting (E.g. shell, Python, Ruby, Powershell) and configuration management using CloudFormation, Chef & Puppet

Cloud Engineer II, Amazon Web Services (AWS), Herndon, VA, US

Dec 2020 - Apr 2021

Cloud Engineer I, Amazon Web Services (AWS), Herndon, VA, US

June 2019 - Dec 2020

- Provided extensive technical support and guidance to a wide range of external customers as they build mission-critical applications on top of AWS
- Served as a key contributor in supporting AWS services that focus on Networking technologies including DX, VPN, VPC, ELB, R53 etc.
- Supported AWS customers with System Administration tasks on Linux (Ubuntu, CentOS, RedHat, Amazon Linux etc.) and troubleshooting networking issues in TCP/IP, DNS, SSH, Routing, firewalls, LAN/WAN etc
- Designed and developed web applications hosted on EC2 based on the three-tier architecture that leverages Elastic Load Balancing (ELB) and Auto Scaling to build a highly available and fault-tolerant infrastructure along with managing full application stacks from the OS up through custom applications
- Responsible for solving customer's cases through a variety of customer contact channels which include telephone, email, and web/live chat specializing in Networking services of AWS
- Applied advanced troubleshooting techniques to provide tailored solutions for AWS customers and drive customer
 interactions by thoughtfully working with customers to dive deep into the root cause of an issue
- Achieved the Subject Matter Expertise (SME) title in AWS Direct Connect service, there becoming the point of contact for critical customer issues with Direct Connect service
- Coached and mentored new hires, developed & presented trainings, wrote tutorials, public facing articles for the developer community
- Partnered and collaborated with development teams on complex issues or contact deflection initiatives, participated in new hiring, wrote tools and scripts to help the team and worked with leadership on process improvement and strategic initiatives.

Research at Centre for Cyber-Physical Systems and Internet of Things, University of Southern California

Jan 2018 - May 2018

- Captured/modeled traffic on a stretch of road using YOLO + GPU pipeline and detected number of vehicles passing through a given region
- Captured and archived real-time video and fed it to an application to detect vehicles using Darknet an open source neural network framework

Robert Bosch Engineering and Business Solutions, Bangalore, Karnataka, India

Jan 2017 - April 2017

- Interned as Module and System Tester in Driver Assistance Systems for high-end cars and improved response time of various systems such as Adaptive Cruise Control and Predictive Pedestrian Protection
- Performed ECU Testing/Simulation and verified test cases of various services using vTestStudio
- Presented topics such as CAN, Ethernet and FlexRay protocols during knowledge sharing sessions

ACADEMIC PROJECTS

Weenix-Unix Kernel Based Operating System

May 2018

- Developed fundamentals for UNIX based OS called WEENIX in C
- Programmed System Calls for process creation, thread creation, mutex implementation, scheduling mechanism, context switching, and synchronization primitives
- Implemented an interface between WEENIX Kernel and underlying file system (ramfs or S5FS)
- Implemented virtual memory management for WEENIX OS, functions for page fault handler, thread cloning, forking a process

OpenFlow Switch and Router Design

Mar 2018

- Designed a switch and a router using OpenFlow and tested it for various topologies and created a firewall to modify switch's behavior
- Used Mininet to simulate a realistic virtual network on a single machine and POX Controller in Python for implementing the switch

Token Bucket Emulation using Multi-Threading

Feb 2018

- Designed a traffic shaper controlled by a token bucket to transmit TCP/IP packets and programmed a time-driven emulation of Token Bucket Algorithm
- Regulated functionality of a user interrupt to abort emulation in a graceful manner and provided statistics
- Implemented a token generator, token bucket, and servers and handled race conditions using mutex (Pthread library)

UNIX Socket Programming

Nov 2017

- Programmed a prototype of AWS MapReduce program to perform computational offloading where a single client offloads computation to a server to in turn distribute load to back-end servers
- Programmed a client server model to govern communication of UNIX sockets for both TCP and UDP connections

A Cloud Based Android Application for Recipe Suggestion

Oct 2017

- Used Amazon Web Services and built an application to suggest users suitable recipes based on input images
- Analyzed and classified input images using AWS recognition to suggest a suitable recipe

Wireshark and Riverbed Modeler

Sept 2017

• Worked on Riverbed Modeler to analyze effect of packet size, network load and collision detection on throughput of Ethernet

- Analyzed exchange of data packets in networking protocols like DHCP, DNS, ARP, Ethernet, HTTP and IEEE 802.11
- Performed extensive evaluation on performance of Router Information Protocol (RIP) and analyzed effect of link failures on network
- Configured and verified performance of Open Shortest Path First (OSPF) routing protocol and observed effect of load balancing

PUBLICATIONS

- The Future of WAN Design Depends on Network-as-a-Service (NaaS) Megaport Blog, 2025
- Simplifying enterprise connectivity with a global AWS Direct Connect partner, ConsoleConnect, 2025
- Enabling Self-Service for Cloud Custodian Policies on AWS using AWS Service Catalog AWS Cloud Operations Blog, 2024
- <u>Deploying Amazon VPC IPAM Using AWS Service Catalog</u>" AWS Networking & Content Delivery Blog, 2023
- IP Address Management for AWS Control Tower AWS Networking & Content Delivery Blog, 2022

THOUGHT LEADERSHIP & RECOGNITION

- Delivered multiple technical talks and webinars on cloud networking and governance, including sessions at AWS and industry conferences.
 - Amplified AWS Core Networking presence at Cisco Live 2025, engaging attendees through four high-impact AWS Theater sessions, strategic partner events, and hands-on booth interactions.
 - o Roadshow in Chicago for AWS Financial Services | May 16, 2025
 - o Simplifying enterprise connectivity with a global AWS Direct Connect partner April 29, 2025
 - o Simplifying enterprise connectivity with a global AWS Direct Connect partner | April 23, 2025
 - o AWS Global Network Demystified: Unlocking Global Scalability and Security | April 22, 2025
 - o Powering NextGen Application Networking and Zero Trust with AWS | April 21, 2025
- Awarded AWS Cloud Engineer of the Quarter (Q3 2020) for technical excellence and customer obsession
- Recognized as AWS Most Valuable Player for outstanding contributions to team enablement and operational excellence