

# SANDEEP REDDY GAGALAPALLY



## Personal details



SANDEEP REDDY  
GAGALAPALLY



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445-237-0403



Papillion, Nebraska

## Skills

Source and Version Control: Git,  
GitHub, Concourse

Operating Systems: Windows, Linux

Python

Bash

Front-End Programming: HTML5,  
CSS3

Telemetry: Grafana, Kibana, Splunk,  
and Google Analytics

Software: ISC Kea DHCP

## Profile

Highly motivated network engineer with over a decade of experience in troubleshooting complex network issues, capacity planning with a focus on performance tuning in large scale networks, developing scripts in python and bash for automation flows, web development, database management, enriching the datasets with machine learning models, and building KPI dashboards.

## Education

### Master's Electrical and Computer Engineering

Aug 2011 - Aug 2013

University of North Carolina at Charlotte, Charlotte, North Carolina

## Employment

### Network Engineer

Nov 2024 - Present

META, Papillion, NE

- Deployed, configured, and managed all network infrastructure across the data center campus.
- Collaborated with partner teams and vendors to oversee daily operations and ensure regional network reliability.
- Scheduled and performed maintenance activities, including upgrades, migrations, and decommissioning of production networks.
- Created deployment packages and maintained as-built documentation and an asset database for installed network equipment.
- Established and implemented global best practices while contributing to the design of scalable network solutions.
- Supported the development, testing, and integration of new hardware and software platforms into the network.
- Participated in an on-call rotation to provide 24x7 support for regional network infrastructure.
- Traveled 10% of the time, with up to 30% travel required based on project demands.

### Network Development Engineer V

Oct 2021 - Present

COMCAST, Philadelphia, PA

- Designed and developed an application to automatically retrieve information on newly added and decommissioned network devices, seamlessly integrating with monitoring tools like SevOne to ensure accurate and up-to-date device records.
- Implemented Kea DHCP software on Ubuntu servers, enhancing functionality through the development of a validation layer API application, enabling the customization of user payloads for managing subnets, leases, and host reservations.
- Developed serverless applications using Flask and AWS Lambda.
- Led software update processes for existing applications and contributed to the successful rollout of software releases.
- Initiated automation of internal processes to enhance Telemetry capabilities, improving change execution and real-time service performance.
- Experience in creating and managing Concourse and Jenkins pipelines to automate build, test, and deployment processes.
- Automated infrastructure deployments using Terraform, ensuring streamlined

workflows and infrastructure consistency.

- Experienced in using HashiCorp Vault for securely managing and controlling access to secrets and sensitive data, ensuring robust security practices in managing credentials and encryption keys.
- Proficient in using the Cucumber framework for behavior-driven development (BDD) and acceptance testing, writing clear and concise test scenarios, feature files, and step definitions using Gherkin syntax.
- Collaborated extensively on GitHub, demonstrating expertise in managing pull requests, conducting code reviews, and tracking issues to facilitate effective team collaboration.
- Provided training to junior Network Development Engineers on internally developed software applications, focusing on network maintenance and auto-mitigation of incident tickets.

#### **Network Engineer IV**

**Oct 2018 - Oct 2021**

COMCAST, Philadelphia, PA

- Expertise in Layer 3 Routing protocols (RIP, EIGRP, OSPF, BGP, MPLS) and redundancy protocols (HSRP, VRRP) in high-availability environments.
- Strong proficiency in Layer 2 technologies (VLANs, VTP, LACP, STP, RSTP, PVST+, MSTP), with advanced troubleshooting skills for L2/L3 connectivity issues.
- Experienced in scripting with Python and Bash for networking, including configuring and troubleshooting F5/A10 load balancers, implementing iRules, and ensuring high availability.
- Developed auto-mitigation workflows for incident ticket resolution using Node-RED and applied machine learning algorithms to predict anomalies in network device interfaces.
- Skilled in database queries (Oracle, MSSQL, MongoDB) and data visualization using Splunk, Kibana, Tableau, and Grafana to derive actionable insights.
- Led technical troubleshooting, performed complex maintenance tasks, and reduced incident response time by 30% through workflow automation.

#### **Network Operations Engineer III**

**Aug 2016 - Oct 2018**

COMCAST, Westchester, PA

- Acted as Level 2 network escalation support for critical applications, providing expertise in data center networking, including load balancing, routing, and switching equipment.
- Served as a technical subject matter expert and mentor, reviewing designs, validating configurations, and leading implementations.
- Managed incidents, tickets, and equipment status monitoring while reviewing and approving environmental changes.
- Split responsibilities between operational support and developing tools using Python frameworks like Django and Flask.
- Developed static webpages using HTML and integrated SevOne APIs to display network performance metrics.
- Ensured operational compliance by identifying gaps and addressing automation challenges, with extensive experience in routing protocols (BGP, OSPF, EIGRP, RIP, IS-IS) and L2/3 VPNs on IOS, IOS XE, and IOS XR platforms.

#### **Network Engineer Consultant**

**Feb 2016 - Aug 2016**

Softsages Technology, Malvern, PA

- Managed implementation and deployment of Cisco devices, applying security

- policies, and troubleshooting issues related to VLANs and HSRP failovers.
- Planned and executed IOS upgrades, while assisting in network architecture, evaluation, and hardware/software recommendations for IP networking.
- Led data collection and analysis from business users to solve problems and identify areas for improvement.
- Maintained the entire routing and switching domain across campus and branch offices, configuring Layer-2 networks, VLANs, Spanning Tree Protocol, Port-Security, VLAN-MAPs, and DOT1X for Cisco and Arista switches.
- Provided Layer-3 redundancy using HSRP and GLBP for high availability, and configured VPC, VDC, and ISSU upgrades on Nexus 7010.
- Extensive experience with BGP, OSPF, EIGRP, RIP, IS-IS, and L2/3 VPNs on IOS, IOS XE, and IOS XR platforms, as well as configuring Juniper routers (EX, MX, M Series) and F5 load balancers.

### **Network RF Engineer**

**Aug 2013 - Jan 2016**

MobileNet Services, Irvine, CA

- Extensive experience in the configuration, integration, and maintenance of Cisco routers (7200, 3900, 2800 series) and switches (6500, 4500, 3750 series), as well as Juniper routers and SRX firewalls.
- Skilled in managing L2/L3 switching technologies, including VLAN creation, port security, STP, and LAN security.
- Proficient in OSPF and BGP configuration for enterprise environments, including redundancy and effective routing strategies.
- Provided support for a range of hardware systems and optimized network performance through continuous monitoring and capacity planning.

### **RF Engineering Intern**

**Aug 2012 - May 2013**

Connectivity Wireless Solutions, Charlotte, NC

- Experienced in site walks for testing In-building signal strength analysis by collecting data using spectrum analyzer and test phones.
- Experienced performing antenna sweeps with load, open and short to check functionality.
- Experienced in designing In-building wireless coverage maps using iBwave software.
- Experienced in installation and commissioning of the DAS system for Verizon and Sprint.
- Helped senior DAS RF Engineers in iBwave Design assignments.
- Performed additional duties to maintain inventory of hardware.

## **Certificates**

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**Cisco Certified Network Professional (CCNP)**

**Cisco Certified Network Associate (CCNA)**

**Amazon Cloud Certified Practitioner (AWS CCP)**

**Comcast Data Science Academy**

**Advanced Google Analytics**

**Introduction to Gen AI**