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Professional Summary

Senior Network & Automation Architect with 9+ years of experience designing and governing OT/ICS, telecom, and enterprise networks across offshore energy, utility, and critical infrastructure. Specialized in NERC CIP compliance, IEC 62443/61850, SCADA/DCS architecture, and IT/OT convergence across Cisco, Juniper, Palo Alto, Hirschmann, and Ruggedcom platforms. Skilled in multi-cloud integration (AWS, Azure, GCP), network automation (Python, Ansible), and high-availability WAN/MPLS design.

Technical Skills

- **Networking:** MPLS, BGP, OSPF, EIGRP, VLANs, STP/RSTP/MST, vPC, VSS, MRP/HSR/PRP industrial ring topologies, Multicast: IGMP/PIM-SM, PIM-SSM
- **OT/ICS:** SCADA/DCS/HMI architecture, IEC 61850, DNP3, IEC 62443 zone-conduit design, Modbus TCP, Claroty xDome
- **Industrial Platforms:** Cisco IE, Hirschmann, Ruggedcom, SEL; process bus & station bus segmentation
- **Security:** Palo Alto, Cisco ASA, Fortinet, Juniper SRX; DMZ/IDMZ design, NAT, SSL inspection, OT remote access
- **Telecom & WAN:** Fiber optic, DWDM, microwave, VSAT, MPLS/WAN for offshore platform-to-shore connectivity
- **Data Center:** Cisco Nexus 7k/9k, F5 BIG-IP LTM/GTM, vPC, QoS, HA design
- **Cloud & Virtualization:** AWS, Azure, GCP, Aviatrix, Transit Gateway, VPC Peering; IloT/OT cloud integration
- **Wireless:** Cisco WLC 9800, Aruba 7000/7200; ISE, RADIUS, TACACS+
- **Automation:** Python, Ansible, GitLab CI/CD, Bash, REST APIs
- **Tools:** SolarWinds, LogicMonitor, Wireshark, Splunk, NetBrain, ServiceNow
- **Compliance:** NERC CIP (CIP-002-014), IEC 62443, IEC 61850, NIST CSF, CMMC, ISO 27001, PRC-005

Education

Master of Science (MS), Applied Data Science Syracuse University - School of Information Studies January 2022 - December 2023
GPA: 3.6

Professional Experience

Equinor – Automation-Network-Telecom Architect

Mar 2026 – Present

New York, NY · Full-Time · Hybrid

- Architect end-to-end **OT/ICS network infrastructure** for Equinor's Empire Wind offshore wind project, designing secure **SCADA communication networks, DNP3/IEC 61850 protocol integration, and IT/OT convergence frameworks** aligned with energy transition objectives.
- Lead **NERC CIP compliance** program ownership across all **OT assets**, including **Medium Impact (SBMT CCR) and Low Impact (Empire Wind I) classification**, maintaining CIP controls documentation, evidence matrices, and audit-readiness posture.
- Design and implement OT network segmentation and secure remote access architecture leveraging **Clarity xDome, enforcing zone-and-conduit models per IEC 62443** across offshore platform and wind farm control environments.
- Develop the Empire Wind **OT Operational Philosophy**, a GL1001-aligned governance document defining OT architecture principles, cybersecurity controls, and operational procedures targeting MC approval.
- Deliver telecom network designs for offshore and subsea environments, including **fiber optic backbone, microwave links, and satellite-based communication systems** supporting remote platform operations and NOC connectivity.
- Design redundant **WAN and MPLS transport architectures** for offshore asset connectivity, ensuring high-availability communications between platforms, onshore control centers, and enterprise IT infrastructure.
- Drive OT network resilience initiatives utilizing ruggedized industrial switching platforms (**Cisco IE, Hirschmann, Ruggedcom**) with redundant ring topologies and fault-tolerant configurations for continuous ICS operations.
- Lead cross-functional architecture reviews integrating **PLC, DCS, HMI, and SCADA automation systems** with enterprise IT and cloud platforms (**Azure, AWS**) to enable real-time operational analytics and IIoT data pipelines.
- Manage vendor OT cybersecurity responsibility matrices (Vestas) and PRC-005 protection system tracking, defining accountability boundaries between OEM, operations, and Equinor for NERC CIP-covered assets.
- Develop and maintain **OT asset inventories, network architecture documentation, and change management procedures** aligned with Equinor's digital and operational technology governance standards and stakeholder review processes.
- Collaborate with **cybersecurity, automation, electrical, and HSE engineering** teams to align network modernization initiatives with operational safety requirements and regulatory compliance across offshore energy infrastructure.

Con Edison - Senior Solution Architect

Oct 2025 – Mar 2026

New York City, NY · Contract · Hybrid

- Architect and implement **SCADA and OT network infrastructures** supporting substation automation, real-time telemetry, and energy management systems.
- Integrate **LogicMonitor** and **SolarWinds** for real-time visibility into OT and SCADA communication paths, predictive alerting, and compliance tracking.
- Build custom dashboards and alert thresholds in **LogicMonitor** to monitor relay devices, PTP accuracy, firewalls, and fiber path latency across substations.
- Design and deploy **redundant IP/MPLS, BGP, and industrial Ethernet networks** across substations ensuring 99.999% availability.
- Integrate **legacy serial communication (RS-232, RS-485, T1)** with modern IP-based routing for hybrid industrial systems.
- Implement **NERC CIP-aligned network zoning, segmentation, and firewall policies**,

- enhancing regulatory compliance and cyber resilience.
- Deploy and manage **ruggedized network devices** (Ruggedcom, Cisco IE, ABB) engineered for harsh OT environments.
- Architect **Zero-Trust network segmentation** for OT and IT convergence, securing access to critical control systems.
- Lead **redundant WAN topology design** leveraging **SD-WAN and MPLS** for high-availability SCADA connectivity.
- Develop **network disaster recovery and failover plans**, validating through simulation and tabletop exercises.
- Configure and harden **firewalls (Palo Alto, Fortinet, Cisco ASA)** with deep-packet inspection and access control enforcement.
- Implement **time-sensitive networking (TSN) and PTP synchronization** for protective relay coordination.
- Conduct **vulnerability assessments, patch management, and compliance audits** for field and control-center networks.
- Collaborate with **cybersecurity, OT, and electrical engineering teams** to align network modernization with operational safety.
- Document **network diagrams, asset inventories, and change management procedures** in compliance with NERC CIP-010.
- Integrate **network monitoring (SolarWinds, NetBrain, Splunk) and AI-Ops analytics** for predictive maintenance.
- Improved SCADA network reliability to **99.999 % uptime**, reducing critical event outages by **40 %** city-wide.

IBM – Senior Network Engineer (Level 3, DevOps Team)
2025

May 2025 – Oct

Albany, NY · Contract · Onsite

- Architected enterprise VPN and firewall infrastructure across Cisco ASA, Firepower, and Palo Alto, enforcing Zero-Trust segmentation for hybrid cloud and on-prem workloads.
- Automated provisioning and compliance using Ansible, Python, and Terraform integrated into GitLab/Jenkins CI/CD pipelines — reducing configuration errors by 35% and accelerating deployments by 25%.
- Deployed HA Layer 3 topologies (LACP, VRRP, ECMP) and microsegmentation policies via VMware NSX and Cisco ACI for fault-tolerant, secure routing.
- Integrated LogicMonitor and SolarWinds with OSS/CMDB for automated topology mapping; tuned SNMP/syslog anomaly detection, improving root-cause analysis time by 30%.
- Configured DNS, DHCP, IPAM (Infoblox), and RADIUS/TACACS+ for centralized identity-based access control across cloud (AWS, Azure, GCP) and on-prem environments.
- Led firewall migration and rulebase consolidation projects; managed change control and RCA reviews, cutting outage recurrence by 40%.
- Supervised a team of seven engineers delivering VPN automation and security operations across hybrid infrastructure.
- Design and enforce **microsegmentation policies** leveraging VMware NSX and Cisco ACI.
- Integrate **OSS provisioning workflows** for network orchestration and zero-touch onboarding.
- Lead **firewall migration projects**, consolidating legacy rulebases and enhancing throughput.
- Supervise a **team of seven engineers**, delivering VPN and security automation across hybrid infrastructure.
- Conduct **vulnerability management, SOC collaboration, and SIEM log correlation** for proactive threat defense.
- Optimize **service delivery pipelines** by embedding configuration checks and validation into CI/CD.
- Automations and rule audits **cut configuration errors by 35 %** and accelerated change

deployments by **25 %**.

Verizon - Senior Network Engineer

Dec 2024 - May 2025

Rochester, NY · Contract · Onsite

- Support **Verizon's enterprise and mobile core** networks, focusing on IP/MPLS, 5G, and transport backbone reliability.
- Engineer and maintain **Layer 3 routing (BGP, OSPF, IS-IS)** across Cisco, Juniper, and Nokia 7750 platforms.
- Deployed and customized **LogicMonitor** collectors for MPLS/5G transport monitoring, enabling proactive detection of jitter, packet loss, and BGP session instability.
- Integrated **SolarWinds** NPM/NTA for backbone capacity planning and NetFlow traffic analytics.
- Troubleshoot **multi-vendor MPLS and Ethernet transport failures** minimizing downtime and SLA violations.
- Integrate **eNodeB/gNodeB and MSC nodes** for LTE/5G services ensuring optimal voice and data handoff.
- Design **QoS and traffic-engineering policies** for high-priority signaling and real-time traffic.
- Deploy **multi-cloud interconnects** using **Aviatrix, AWS TGW, and Azure vWAN**, enabling secure global connectivity.
- Automate configuration validation and audits using **Python, Ansible, and REST APIs**.
- Configure and monitor **NetBrain, SolarWinds, and SNMP traps** for proactive issue detection.
- Lead **data-center migrations and route re-homes**, implementing rollback and failover strategies.
- Optimized MPLS traffic flows, **reducing latency 20 %** and improving cross-region throughput by **30 %**.
- Design and enforce **firewall and VPN policies** across global IPsec tunnels and MPLS backbones.
- Conduct **P1 outage management**, root-cause analysis, and escalation leadership during critical events.
- Manage **configuration baselines and version control** through Git-integrated CMDB repositories.
- Implement **SD-WAN (Viptela)** for multi-cloud connectivity and dynamic path optimization.
- Mentor Tier-2 engineers and develop SOPs for routing, troubleshooting, and change management.
- Support **5G rollout** initiatives ensuring packet-core resiliency and interworking with 4G systems.

National Grid - Network Engineer II (NOC) 2024

Feb 2023 - Nov

Syracuse, NY · Full-Time · Onsite

- Designed and deployed **WAN and MPLS networks** across substations and control centers.
- Configured **OSPF, BGP, route maps, and redistribution** for optimized routing and traffic engineering.
- Implemented **Palo Alto NGFWs, Cisco ASA, and F5 LTM** for secure connectivity and load balancing.
- Migrated **Cisco ASA to Palo Alto** with enhanced IDS/IPS and application visibility.
- Implemented **LogicMonitor** alongside **SolarWinds** to unify alerting for substation WAN links, firewalls, and Nexus core infrastructure.
- Built monitoring templates in **LogicMonitor** for rugged OT devices and automated performance baselines.

- Managed **Cisco Nexus 7k/5k/2k** switching environments for data-center modernization.
- Automated device onboarding, configuration backups, and compliance checks using **Python and Ansible**.
- Led **data-center migrations and network refreshes**, improving capacity and reliability.
- Deployed **Aviatrix CoPilot and multi-cloud visibility** for AWS/Azure integration.
- Implemented **802.1x network access control** via Cisco ISE to secure endpoint access.
- Supported **wireless infrastructure (Cisco 9800, Aruba)** improving performance and coverage.
- Administered **Riverbed WAN optimization** for latency reduction and bandwidth efficiency.
- Enforced **QoS and NIST/CMMC compliance**, achieving 100% audit pass rate.
- Performed **firewall rule optimization, vulnerability patching, and ACL cleanup** for network hygiene.
- Developed network documentation in **Visio, ServiceNow, and CMDB**, ensuring audit readiness.
- Mentored junior engineers on MPLS, firewall rule analysis, and cloud connectivity principles.

Verizon - Network Engineer I (Routing & Connectivity)

Aug 2021 – Jan 2023

Syracuse, NY · Contract · Remote

- Managed **core routing (BGP, OSPF)** across **Nokia 7750/7705 and Cisco ASR platforms**.
- Supported **mobile switching centers (MSC)** and transport backbone for LTE and 5G services.
- Designed and deployed **site-to-site VPNs** (Cisco ASA, Palo Alto, Checkpoint) for secure enterprise links.
- Implemented **GET VPN and DMVPN** for branch connectivity and encryption at scale.
- Administered **DNS, DHCP, and IPAM** services with redundancy and failover.
- Configured **LogicMonitor** for real-time monitoring of Nokia 7750/7705 and Cisco ASR platforms, improving detection of MPLS label-switching faults.
- Enhanced **SolarWinds** dashboards for LTE/5G site integrations and transport backbone health.
- Deployed and tuned **F5 LTM/GTM** for application load balancing and global traffic management.
- Monitored network health via **NetBrain, SolarWinds, and Wireshark**, reducing mean-time-to-resolution (MTTR) by 30%.
- Built **Python monitoring scripts** for device status automation and proactive fault detection.
- Configured and maintained **VLANs, EtherChannel, STP, and trunking** for Layer 2 resilience.
- Upgraded **Nokia and Cisco firmware**, standardizing OS versions across production.
- Designed **SD-WAN (Viptela)** solutions for hybrid cloud and branch performance optimization.
- Collaborated with **RF and transport teams** to ensure seamless 5G site integrations.
- Participated in **24x7 on-call rotations**, resolving high-priority incidents promptly.
- Maintained **network topology, IP plan, and Visio diagrams** for cross-functional reference.
- Supported **Zero-Trust adoption** by segmenting networks and enforcing strict ACLs.

Toshiba - Network Implementation Engineer

Jan 2020 – Jul 2021

San Francisco, CA · Full-Time · Remote

- Designed enterprise **LAN/WAN architecture** using Cisco Catalyst and Nexus platforms.
- Implemented **OSPF, EIGRP, and BGP** routing for scalable inter-office connectivity.
- Integrated **LogicMonitor** and **SolarWinds** for multi-site enterprise monitoring, enabling proactive WAN performance and branch site health checks.
- Built custom **LogicMonitor** modules for DMVPN tunnels, QoS queues, and Meraki telemetry.
- Deployed **Meraki SD-WAN and DMVPN** ensuring high-availability across 20+ branches.
- Configured **IPSec VPNs and firewall policies** (Cisco ASA, Fortinet) for secure remote access.
- Integrated **wireless controllers (Cisco 9800, Meraki)** and APs for optimized coverage.
- Automated health checks and reporting using **Python and SNMP polling scripts**.
- Migrated legacy systems to **hybrid cloud infrastructure (Azure/AWS)** for scalability.
- Designed **QoS and VLAN segmentation policies** to prioritize voice and video traffic.
- Implemented **network performance monitoring** with SolarWinds and PRTG.

ComputerCare - System Engineer

Apr 2017 – Dec 2019

San Francisco, CA · Full-Time · Onsite

- Started as an intern during undergraduate studies before transitioning into a full-time systems engineering role.
- Supported enterprise client environments through ComputerCare for organizations including Google, Meta, Robinhood, Uber, and Lyft.
- Assisted with enterprise infrastructure support, hardware deployments, and endpoint integration initiatives.
- Developed and optimized embedded firmware and low-level hardware/software interfaces.
- Improved integration workflows and system reliability through architecture-focused troubleshooting and optimization.
- Supported diagnostics, infrastructure deployments, and enterprise operational support across client environments.
- Built foundational experience across systems engineering, infrastructure operations, and integrated technology environments.