



Skills

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|-------------------------------------------------|-----------------------------|---------------------------------------------------|---------------------------------|
| ✓ Network design and capacity planning/strategy | ✓ Cisco Routing & Switching | ✓ FTP | ✓ Routing protocols (OSPF, BGP) |
| ✓ Troubleshooting with Wireshark | ✓ TCP/IP | ✓ SIP | ✓ VPN (IPSec/SSL) |
| ✓ Python scripting | ✓ DNS | ✓ ISUP | ✓ Linux |
| | ✓ DHCP | ✓ Switching protocols (IPv4, IPv6, TCP, UDP, STP) | |
| | ✓ SNMP | | |

Experience

JUNE 2016 – PRESENT

Network and Systems Engineer / T-Mobile | Bellevue, WA

Border Gateway Function (BGF) Expansion

- Tripled capacity for LTE and 2G/3G handover by expanding BGF nodes on nationwide network from 300K to 900K per node
- Led design team with capacity planning via network KPI analytics and testing of new hardware and virtual machines
- Added extra layer of security by implementing feature to reallocate subscribers' information stored on network node
- Completed project in under 8 months to meet T-Mobile's industry leading VoLTE subscriber growth (4.4M in 2014 to 52M in 2018)

Enhanced Voice Services (EVS) 2016 Launch

- Launched new EVS super wideband speech audio codec to become first and only carrier in North America to provide the service
- Enhanced existing transcoding architecture by enabling mobile originating and terminating proactive transcoding
- Validated EVS on Samsung Galaxy S8, LG V30, iPhone 8 and X by completing series of test cases to ensure exceptional QoS at launch
- Added DSP cards to BGFs to maintain memory usage across network
- Provided training material and courses to multitude of teams including Engineers, NOC, Marketing, and Retail Associates

Scam ID and Blocking Protection

- Integrated scam database query mechanic on several network nodes on voice core and IMS network
- Worked with vendors on testing of new hardware and software features
- Identified over 1 billion scam calls and blocked 72 million callers since March 2017 launch while saving Americans \$350M/year

Google Fi

- Provided resources to support and troubleshoot as Google's MVNO (Mobile Virtual Network Operator)
- Enabled VoLTE for subset of Google Fi users (Google Pixel and Pixel 2) in Spring 2017

SEPT 2014 – SEPT 2015

Senior Support Engineer / Synology | Bellevue, WA

Validation and Testing of Synology NAS OS ver. 5.3

- Co-created Wiki page for validation and test procedures for Tier 2 Support team
- Completed performance and load testing of hardware & software and resolved network related issues using Wireshark
- Launched in Nov 2015 and won CNET's Editors' Choice awards for most advanced OS for NAS servers

Research and Development of OS ver. 6.0

- Wrote new OS training material for the Tier 2 Support team
- Collaborated with teams overseas to translate training material for international markets

MARCH 2014 – SEPT 2014

IT Network Engineer / Navy Special Warfare Resilience Program | Seattle, WA

Automation of Daily KPI Reports

- Used object-oriented python scripting to automate daily KPI reports from network servers
- Received the Executive Awards for Innovation of the Month in July 2014 for the non-profit program

Education

JUNE 2016

Bachelor of Science in Electrical Engineering / University of Washington | Seattle, WA