

Network architect and reliability engineer with 25 years of experience leading the conception, architecture, development, design, and implementation of complex, performant, reliable, and secure software, hardware, and network systems and tools that improve the security, reliability, and efficiency of global backbone, cloud, data center, and enterprise networks.

## TECHNOLOGIES AND LANGUAGES

**networking** Juniper - Cisco - Arista - ZPE - Cumulus - Quanta - PaloAlto - A10 - F5 - OSPF - IS-IS - BGP/MP-BGP - Anycast - MPLS VPNs - RSVP-TE - EVPN - VxLAN - IP-PIM - NETCONF/RESTCONF - 100/400/800G Ethernet

**systems** Debian/Ubuntu - RHEL/CentOS, Fedora - FreeBSD - VMWare ESXi - RaspberryPi - DNS - Infoblox - Device42 - BBNA - Netbox - Apache - Nginx - Traefik - HAProxy - RANCID

**observability and monitoring** syslog - SNMP - netflow/sflow - LibreNMS - Sensu - Zabbix - Nagios - PagerDuty - Splunk - Kentik - ThousandEyes

**development** Go - Python - Bash - Make - Ansible - Nornir - Jinja - SQL - Git - Sapling/Mercurial - YAML - JSON - HTML, CSS - Terraform/OpenTofu, Pulumi - some C and Java

**cloud infrastructure** Digital Ocean - Linode - AWS - GCP - Compute, storage, security, CDN, L2-interconnection, load balancing, and VPCs

**methodology** Agile - Six Sigma - Lean - ITIL - Test-Driven Development

## PROFESSIONAL EXPERIENCE

### ***Magnit***

***Network Engineer 5 @ Meta*** | 2023-10 - 2025-10

- Network design, automation, and management supporting Meta's global product engineering labs; developed and maintained configurations for multi-vendor HPC, data center, and WAN networks
- Mentoring and coaching, developed standards, documentation, wikis, and led formal and informal training; turned personal onboarding experience into team-specific process used to onboard over 20 new CW and FTE engineers; significantly reduced time-to-individual-productivity
- Co-led cross-functional projects to implement new products, 3+ Tbps WAN capacity, EVPN/VXLAN data center fabrics, and RoCEv2 migrations

### ***Adobe***

***Senior Cloud Network Reliability Engineer*** | 2021-09 - 2022-12

- Championed initiatives to add rigor to network engineering practices including design and operations reviews, blameless post-mortems, sustainable on-call, and automating configuration and operation
- Created containerized tooling using Ansible, Nornir, Jinja, FastAPI, and Python to integrate with/update existing applications, automate upgrade and deployment processes, and standardize configurations

### ***Box***

***Senior Network Engineer*** | 2019-11 - 2021-08

- Led cross-team initiatives to improve the performance, capacity, and reliability of Box's WAN, data centers, peering, and multi-cloud infrastructure
- Updated/maintained automation with Ansible, Python, Jinja, Puppet, Github, and Docker for configuration, upgrades, ZTP, management, and operation of Arista, Juniper, and Cumulus devices
- Enabled executive visibility of projects and network status by creating and maintaining dashboards and documentation in Confluence, Jira, and Splunk
- Partnered with NRE to overhaul network monitoring and observability with Sensu, PagerDuty, LibreNMS, and Splunk, simplifying alert configuration and significantly improving alert utility/signal-to-noise ratio

**HERE Technologies****Principal Network Engineer** | 2018-08 - 2019-10

- Design, automation, reliability, performance, and scaling of HERE's global on-premises and hybrid multi-cloud network infrastructure enabling specialized mapping technologies, location data, and automotive navigation services
- Introduced Ansible to enforce compliance, improve standardization, and reduce deployment times
- Performed extensive troubleshooting to identify software bugs and rewrote QoS policies to resolve multiple long-standing issues, reduced packet loss and improved throughput 5-10x globally
- Edge network redesign; hybrid multi-cloud interconnection and inter-VPC/VPN routing, 100G migration roadmap

**Gaikai/Sony****Senior Network Engineer** | 2017-01 - 2018-05

- Network planning, design, documentation, implementation, and operation of WAN, edge peering, load balancing, VPCs, and data centers for PlayStation Now's game streaming services
- Designed and implemented routing and load-balancing changes reducing intra-regional latency 2-4ms
- Developed and implemented process and training improvements increasing operational efficiency and reducing deployment times by 10%
- Led new technology evaluation and testing; RDMA/RoCE, commodity hardware, IPv6

**Microsoft****Senior Engineer, Network Strategy and Planning** | 2014-03 - 2017-01

- Led company-wide initiatives to enhance customer experience, improve network capacity, performance, and reliability, and optimize the existing peering, CDN, and backbone infrastructure
- Education, outreach, and strategic partnership building at events and conferences (NANOG, RIPE, PTC, GPF); elected to DE-CIX Customer Advisory Board
- Created reports and tooling with PowerBI, Python, Excel to unblock 60 site builds and prevent \$15 million of over-spending

**Juniper Networks****Systems (Sales) Engineer** | 2012-05 - 2013-08

- Involved with all aspects of pre/post-sales to a global service provider; developed consultative relationships with technical and executive decision makers; led architecture and design reviews
- Key team contributor in transforming resistance into success to exceed quota, and deliver over \$40 million in sales revenue

**Infocrossing/Wipro****Staff Engineer/Network Architect** | 2010-07 - 2012-05

- Definition, evolution, documentation, and implementation of backbone, cloud, data center architectures, and solution designs for a managed services provider (MSP).
- Developed, tested, and implemented designs that reduced network costs 10-30%, increased capacity 1000%, and improved availability from <99.5% to 99.99%
- Managed IP addresses, ASNs, developed training and implemented process, procured v4 & v6 addresses from RIRs

**Intelepeer****Principal IP Engineer** | 2009-03 - 2010-06

- Hired to stabilize, redesign, document, and rebuild the network of a wholesale VoIP carrier
- Developed automation, led installs and site builds, and successfully completed migrations; reduced OPEX by 30%, improved network availability from <95% to 99.99%, and increased capacity 2000%

**Yahoo!****Tech Lead, Senior Network Engineer** | 2007-05 - 2009-02

- Co-led the global teams responsible for edge, backbone, and data center network engineering and operations. Worked with peers and providers to implement and troubleshoot connectivity worldwide
- Converted backbone IGP from OSPF to IS-IS; assisted in the unification of disparate worldwide ASNs into one single global network, stretching from Singapore to Switzerland, while in service, with no downtime

**Alcatel-Lucent NZ****Principal Engineer** | 2006-08 - 2007-05

- Lead Architect on complex solution design projects for Telecom New Zealand
- Created and tested L3VPN-based products; contributed to metro and backbone architecture

**tw telecom****Lead IP Network Engineer** | 2005-06 - 2006-07

- Installed and configured stopgap monitoring tools (Nagios, Munin, Syslog-NG); lowered MTTR and beat the commercial solution by two-years; implemented Cfengine to automate Debian, RHEL, and Solaris

**Terremark****Lead Network Engineer** | 2004-01 - 2005-01

- Responsible for performance, design, documentation, implementation, and configuration of a carrier neutral IXP and data center provider; performed traffic/flow analysis in support of peering activities; mentored junior engineers

**Fusiontel****Senior IP Engineer** | 2002-09 - 2004-01

- Sole network engineer; responsible for design, documentation, and 24/7 operation of an international VoIP carrier; configured ACLs, BGP, and SIP/H.323 gateways; managed IP addressing, administered Solaris, Debian, NTP, Apache HTTP, Bind DNS, Syslog-NG, Cricket
- Designed and implemented international L2VPN service with Cisco ATOM

**USA.net****Network Engineer** | 2001-03 - 2002-05

- Network design, security, configuration, troubleshooting, and day-to-day operation of routers, switches, firewalls, load-balancers, and VPN concentrators from Cisco and Netscreen

**Various****NOC Technician** | 1999-09 - 2001-01**U.S. Marine Corps Reserve****Lance Corporal** | 1998-01 - 2002-04**CERTIFICATIONS AND AFFILIATIONS**

Member - NANOG	2012-present
Board Member, Customer Advisory Board - DE-CIX	2014-2016
Vice President - Colorado Chapter of the Internet Society	2011-2016
Steering Committee Member - Rocky Mountain IPv6 Task Force (RMv6TF)	2011-2016
Juniper Networks Certified Internet Specialist (JNCIS-ENT)	2012-2015
Juniper Networks Certified Internet Specialist (JNCIS-M)	2006-2009
Cisco Certified Network Professional (CCNP)	2002-2008

**EDUCATION**

**Associate of Arts, Physics**  
Miami-Dade College

**SELECT PROJECTS**

**YACHT Another Custom Hugo Theme** 2022 - present  
YACHT is a punny and recursively named theme for the Hugo static site generator using the Catppuccin Palettes that aims to be simple, mobile-first, accessible, responsive, and have minimal external dependencies.  
• <https://github.com/ejsdotsh/yacht-hugo-theme>

**LINKS**

 <https://linkedin.com/in/ejsdotsh/>