# Nicklas R. Peelman

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## Profile

Motivated and passionate about technology, I bring a wide range of knowledge and experience to whatever opportunity presents itself. I have experience in network engineering, systems administration, application design and development, website design and administration, digital communications, and user support. I crave variety in my work and thrive on the ever-changing ecosystem that Information Technology creates.

## Experience

#### RTC Communications, Rochester, Indiana

#### **Network Architect**

- Performed a total network overhaul for a small-but-growing triple-play service provider; primary goals
  were to alleivate past problems and secure a path for growth
- Ensure maximum uptime and network stability through active network monitoring and data collection, using tools such as SNMP, LibreNMS, ElasticSearch, OcularIP, and more
- Oversaw and architected multiple large projects; legacy network migration, central office overhauls (including DC power work), regional optical transport (DWDM), new peering agreements, establishing new colocation facilities
- Worked with both field technicians and support staff to investigate and resolve customer-facing issues
- Worked with all layers of the organization, from the executive staff to field technicians, to establish scalable, standardized processes in order to facilitate growth
- Deployed and reconfigured VMware ESXi, Dell PowerStore SANs, Nokia SROS and SRLinux, and other technologies to increase server reliability

#### Intelligent Fiber Network, Indianapolis, Indiana

Network Engineer II

- Design, test, and implement photonic, OTN (G.709), and MPLS network augmentations to facilitate core network changes and customer-driven upgrades
- Configuration and troubleshooting of MEF-compliant MPLS services (EPL, EVPL, EPLAN, EVPLAN); includes underlying protocols such as OSPF, RSVP, LDP and LSPs
- Providing equipment costs for business class service quotes (Ethernet Transport, Internet Access, and Optical Wave services)
- Participate in on-call rotation and serve as escalation point for Operations and Network Engineer I staff
- Deployed and managed a variety of platforms, including Nokia 1830, 7750, 7250, 7210, and NFM-T, as well as & Ciena 6500, 4200, and 3900 platforms

#### Enhanced Telecommunications Corporation, Greensburg, Indiana

#### Senior Network Engineer

- Maintain, improve, and grow a redundant, stable, and fast network interconnecting southeastern Indiana using both proven and cutting-edge technologies
- Ensure maximum uptime and network stability through active network monitoring and data collection
- Oversaw and principally architected multiple large projects, including Central Office power overhauls (DC and AC plants) and a new virtualization cluster deployment
- Worked closely with outside plant and construction groups, as well as multiple vendors, to secure new fiber routes, site and equipment selection for new cabinets, and coorindation of new colocation facilities as part of a \$6M network expansion

April 2017 - September 2020 March 2020 - September 2020  $\checkmark$ 

September 2020 - July 2021

July 2021 - Present

#### Network Engineer

- Manage and extend a large service-provider network using carrier-grade hardware and software
- Serve as primary engineer while implementing new BGP architecture for a 13,000 customer network
- Extend our MPLS network and increase capacity of existing routers
- Work with our outside plant group to deploy business circuits across our MPLS network
- Investigate and resolve tier 3/4 problems that arise
- Experience with a variety of platforms, including Calix E7 & Cisco IOS-XR

#### The Data Cave, Columbus, Indiana

#### Systems Administrator

- Building, evolving, and supporting network, storage, and Linux infrastructure in a highly available data center environment
- Performing installation, maintenance and support of network infrastructure, servers, PLCs, software
- Configuring, debugging and supporting multiple infrastructure platforms
- Perform high-level root cause analysis for service interruption and implement preventive measures where necessary
- Scripting, software development, automation as needed to facilitate the needs of a colocation facility

#### Bloom Insurance Agency, Bloomington, Indiana

## Linux Systems Engineer

- Developing, maintaining and supporting network and Linux infrastructure
- Performing installation, maintenance and support of system software/hardware and user support
- Configuring, debugging and supporting multiple infrastructure platforms including AWS, VMware, Windows, Linux, Cisco IOS and Juniper JunOS
- Perform high-level root cause analysis for service interruption and implement preventive measures where necessary
- Used VMware vCenter, Dell & Coraid SAN hardware, Asterisk, Ubuntu Server (Linux), and a multitude of other technologies to achieve the company's goals

## Crucial Intellect, LLC, Seymour, Indiana

#### Owner

- Systems Administration duties: Windows Server 2012 installation, configuration, and migration, Subversion administration & migration, network upgrades (HP ProCurve)
- Advised on redesign of Apache/PostgreSQL/PostGIS webcluster to streamline and stabilize production web application environment
- Also served as project lead, UI prototyper, and client interface for AgriSite IPM
- Worked with iOS & webapp developers in an agile environment, using Xcode, Ruby on Rails, and a variety of Open Source and third party technologies

April 2013 - October 2015

October 2015 - April 2017

February 2012 - April 2013

# **Technical Skills**

- Network Engineering, Architecture, Design
- Optical Transport Practices; DWDM, Multiplexing, OADM, ROADM, FOADM, Muxponding, Transponding, Amplification, 3R, OEO
- Fiber Optic Troubleshooting; Optical Time Domain Reflectometer (OTDR), Power meters (dB vs dBm), VFLs, fiber hygiene
- Metro Ethernet; E[V]PL, E[V]PLAN, E[V]PTREE
- MPLS (Multi-Protocol Label Switching); Psuedowires, L2VPN, L3VPN
- VPLS (Virtual Private LAN Service), VPRN (Virtal Private Routed Network)
- BGP Peeering, Internet Exchanges (IX), Route Policies, Prefix Filtering, Autonomous Systems, IRRs
- Apple OS X Client/Server Platforms
- Apple iOS, including Mobile Device Management (MDM)
- Windows Client/Server Platforms
- Shell Scripting: Bash, Ruby, Python, Perl, Batch, PowerShell
- Virtualization: VMWare vSphere & vCenter, ESXi
- Hyperconverged Infrastructure (HCI); Cisco Hyperflex
- Cloud Providers: Amazon Web Services, Microsoft Azure, Linode, Digital Ocean
- Configuration Management: Puppet, Git
- Linux & Unix Distributions: Red Hat Enterprise Linux, Rocky Linux, CentOS, Debian, Ubuntu, Solaris, FreeBSD
- Network Monitoring & Analysis: LibreNMS, Nagios, Cacti, Nmap, Rancid, Snort, Squid, OcularIP, Wireshark
- Network Switching & Routing: Cisco (IOS, IOS-XE, IOS-XR), Juniper (JunOS), HP ProCurve, Nokia (TimOS/SROS/SRLinux)
- Systems Analysis & Design, SDLC
- Systems Administration Methodologies (Pets vs Cattle)
- ElasticSearch / Logstash / Kibana (ELK)
- AC and DC Power Systems; Single- & Three-Phase UPS, Rectification & Inversion, 12/24/48V<sub>DC</sub> & 120/208/240V<sub>AC</sub>, Positive Ground systems
- System & Network Troubleshooting
- Cat5/Cat5e/Cat6, single- & multi-mode fiber optic cabling
- TCP/IP Communications, IPv4, IPv6, Ethernet
- Wireless Networking (WLAN, 802.11a/b/g/n/ac/ax)
- Digital & Analog Telephony (VoIP, POTS, Asterisk, MGCP, GR303, Metaswitch)
- Familiar Protocols: SMTP, DNS, DHCP, SIP, SNMP, HTTP, HTTPS, FTP, SFTP, RTSP, SMB/ CIFS
- Web Development: HTML, CSS, AJAX, PHP, MySQL, Ruby, Python
- Mac Development: Objective-C, XML, Xcode
- Windows Development: Visual Studio, C#, .NET
- Version Control: Git, Subversion, Mercurial
- Issue Tracking & Documentation: Notion, JIRA, Confluence, Trac, Redmine, TeamSupport, Mantis, Bugzilla, PivotalTracker, Trello
- Windows Management: App-V, SCCM, IIS, MSDNS, MSSQL, Active Directory, Hyper-V
- Email Systems: Exchange, Zimbra, Google Apps, Rackspace Email
- Instant Communications: Slack, Teams, Google Chat
- Microsoft Office, Salesforce, Workfront

## **Open Source**

CoRD Project, Freelance Development March 2009 - January 2015

- Resurrected the project which was near abandonment
- Implemented dozens of new features and configuration settings
- Drove development through a major release cycle and three minor cycles

Various Projects, Freelance Development February 2009 - January 2015

- Contributed code to a variety of open source projects
- Extended projects through plugins, templates, themes, etc.

## **Education**

B.S. Network Engineering Technology 2002-2007, Purdue University

- Minor: History of Science and Technology
- GPA: 3.19 (4.00 scale)

## Certifications

- MEF Carrier Ethernet Certified Professional December 2019
- Nokia Nokia Network Routing Specialist I (NRS-I) October 2018 2021, September 2023 Present
- Cisco Cisco Certified Network Associate (CCNA R&S) March 2018
- Zyxel Zyxel Certified Network Professional Switching Level 2000 March 2017
- VMware VMware Certified Associate (VCA6-DCV) 2016

#### Training

- Carrier Ethernet Academy MEF-CECP Boot Camp December 2019
- Digium Asterisk Advanced Training April 2014

#### Conferences

- Great Lakes Technology Showcase October 2019
- Nokia SReXperts 2018, 2022, 2023, 2024
- Eaton Central Power Quality Tour November 2016
- VMware Indianapolis VMUG UserCon 2016, 2017
- Microsoft Microsoft Management Summit (MMS) 2009
- LabMan Conference 2009
- Apple Worldwide Developers Conference (WWDC) 2006

#### **Memberships**

- LOPSA (League of Professional System Administrators 2015-2017
- Federal Bureau of Investigation's InfraGard Association 2008-Present
- Purdue's Malware Research Team 2008-2010