

DAVID LAPORTE, CISSP

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I am an IT generalist with over 20 years of senior-level technical and leadership experience in networking, systems, and IT security. Architecting and troubleshooting large systems end-to-end is my passion.

INDUSTRY EXPERIENCE

HARVARD UNIVERSITY

Director, IT Infrastructure Strategy

Cambridge, MA
December 2016 to Present

- Drove efforts to develop cloud-based storage services, metadata/retention policies, and consolidate and migrate legacy storage platforms to the cloud
- Led program for “top 5” strategic IT goal to improve wireless networking across campus. Worked with engineering teams to implement technical best practices and implement support tools, communications teams to develop outreach approaches, and finance teams to secure funding for the program
- Deployed Slack across IT organization, eliminating multiple barriers due to the use of incompatible tools
- Advised senior leadership in access networking vendor selection process. Recommendations resulted in approximately 45% savings, an improved user and guest on-boarding experience, and a campus-wide identity-based networking strategy
- Assisted in migration to new network on-boarding platform from legacy network registration tool. Wrote tools to migrate user/device data and extend functionality to support desks across campus

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Director, Infrastructure Design and Engineering

Interim Director, Security

Cambridge, MA
February 2015 to December 2016
May 2016 to December 2016

- Led organization of 30+ staff with responsibility for the design, implementation, and ongoing operation of Institute networking, virtualization, computation, storage, security, and collaboration platforms
- Drove efforts with leading IaaS providers to establish dedicated connectivity solutions and migrate compute/storage resources to the cloud
- Developed and executed strategy to migrate 75% of compute capacity to IaaS providers within 30 months; all milestones were successfully met
- Oversaw growth of footprint and bandwidth of MIT network; lead contract negotiations with service providers and vendors to expand regional presence and deploy 100Gbps connectivity
- Expanded footprint and capacity of Northern Crossroads, a consortium of 20+ large New England educational and research organizations providing high-speed connectivity to Internet2 and research peers around the world. Worked with key stakeholders at each institution to negotiate and provide service offerings on their behalf, including DDoS mitigation and cloud service provider connectivity.
- Managed incident response, attack mitigation, security engineering/operations, and security policy development

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Manager, Network Infrastructure and Security Operations

Cambridge, MA
December 2013 to February 2015

- Lead team of four security analysts and engineers and served as primary technical resource for all Institute-related IT security matters, including monitoring and incident response
- Hands-on manager of team of 12 engineers with responsibility for network architecture, engineering, and on-going monitoring/support

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Senior Network Engineer

Cambridge, MA
November 2012 to December 2013

- Hardened network elements against attack, including implementation of control plane protection, encrypted management access, two-factor authentication, and campus-wide DDoS mitigation
- Built VRF/BGP-based routing policy server to implement traffic quarantine and identity-based firewalling
- Implemented split DNS and migrated critical web properties to CDN

HARVARD UNIVERSITY – NETWORK SERVICES GROUP

Manager, Network Systems and Management Services

Cambridge, MA
June 2011 to Present

- Consolidated compute and storage resources on to Cisco Unified Computing System (UCS) and SAN storage
- Managed a team of six systems engineers, developers, and NMS gurus
- Responsible for University-wide deployment and operation of Splunk logging infrastructure, Infoblox DNS/DHCP, and custom integration using XML/SOAP and JSON/REST
- Responsible for the NOC Portal - a custom-developed application providing role-based access to relevant metrics and service requests from University administrators

HARVARD UNIVERSITY – NETWORK AND SERVER SYSTEMS

Network Services Architect

**Cambridge, MA
July 2009 to June 2011**

- Deployed and managed QRadar SIEM
- Implemented highly-available and modular authentication architecture for 802.1x, NAC, and VPN interfacing with University identity management systems
- Deployed IPv6 into production across wired/wireless networks and enabled native access to infrastructure services

HARVARD UNIVERSITY – NETWORK AND SERVER SYSTEMS

Security Manager

**Cambridge, MA
February 2005 to July 2009**

- Facilitated creation of NOC Customer Portal – a unified, role-based interface to NOC data, services, and metrics
- Deployed network access control (NAC) across student networks
- Coordinated incident response and forensics within Network and Server Systems
- Architected PCI DSS compliant infrastructures to facilitate e-commerce and point-of-sale transactions
- Integrated two-factor authentication into existing business processes

HARVARD UNIVERSITY – NETWORK OPERATIONS CENTER

Senior Network Security Engineer

**Cambridge, MA
November 2000 to February 2005**

- Provided security audits and vulnerability scans to University community
- Evaluated and deployed 802.11 wireless networking/authentications
- Implemented change management system for all network device configurations
- High-bandwidth, asymmetric anomaly and signature-based network IDS deployment
- Implemented and administered Harvard IPv6 demonstration network
- Technical contact for University VoIP pilot program

HARVARD UNIVERSITY – NETWORK OPERATIONS CENTER

Systems Engineer

**Cambridge, MA
November 1997 to August 2000**

- Created security policies and procedures for Network Operations Center
- Wrote and maintained software to administer e-mail aliases for all Harvard employees
- Designed, implemented, and maintained university-wide IDS infrastructure
- Deployed VPN solution to Harvard community
- Built RedHat kickstart and Sun Jumpstart build environments
- Developed DNS zone management system for Harvard namespace

TEACHING EXPERIENCE

HARVARD UNIVERSITY

Lecturer – Extension School

CSCI-E46: Applied Network Security

**Boston, MA
January 2016 to Present**

NORTHEASTERN UNIVERSITY

Lecturer – Masters of Information Assurance Program

IA-5130: Computer Systems Security (on-campus and on-line)

Northeast Collegiate Cyber Defense Competition, White Team Captain

**Boston, MA
September 2009 to June 2014**

HARVARD UNIVERSITY

Teaching Fellow – Extension School

CSCI E-45: The Cyber World

CSCI E-170: Security, Privacy, and Usability

CSCI E-132: Advanced Topics in Data Networking

CSCI E-135: Computer Networks and Network Programming

CSCI E-131b: Communication Protocols and Internet Architectures

**Cambridge, MA
June 2002 to Present
September 2014 to Present
September 2006 to June 2009
January 2003 to January 2009
September 2002 to January 2003
June 2002 to January 2003**

EDUCATION

NORTHEASTERN UNIVERSITY

College of Computer Science

Masters in Information Assurance

**Boston, MA
September 2006 to May 2009**

NORTHEASTERN UNIVERSITY

College of Computer Science

Bachelor of Science in Computer Science, 2000

**Boston, MA
September 1995 to June 2000**

TECHNOLOGIES

Languages: Perl, Python, UNIX shell scripting, SQL
Operating Systems: RHEL, IOS, Windows Server, OS X
Applications: Apache, MySQL, Postfix, ISC DHCP/BIND, Infoblox DNS/DHCP, Nagios
RANCID, NetMRI, Puppet, Ansible, Github, Splunk, F5 LTM/GTM, Statseeker, AKIPS
Authentication: LDAP, RADIUS/TACACS+ (Cisco ACS, Radiator, FreeRADIUS),
Multi-Factor (Duo Security, RSA SecureID), 802.1x
Security Devices/Software: Snort, Bro, Nessus, Metasploit, Cisco ASA, Fortinet Fortigate, Cisco Stealthwatch, Cisco
FirePOWER, Aruba ClearPass
Virtualization/laaS: VMware vSphere, VMware vCloud Air, AWS
Networking: IPv6 deployment, high-performance network monitoring, Cisco wireless/routing/switching,
Aruba wireless, OSPF, BGP, CDN, VRF

PROJECTS

PacketFence Open-source network access control (NAC) solution
<http://www.packetfence.org> Co-creator and lead architect
Acquired by Inverse Inc., May 2008

CERTIFICATIONS

Certified Information Systems Security Professional (CISSP)
Red Hat Certified Engineer (RHCE)
Cisco Certified Network Professional (CCNP, lapsed)
Certified ScrumMaster (CSM)
ITIL V3 (2011) Foundation