

NEEL SHAH

Computer Science | Sys Admin | Computer Security

* References can be provided upon request * | * Last updated 09/2016 *

CONTACT INFO

PHONE NUMBER (412) – 254 – 6335

EMAIL nks@shah7.com

HOME PAGE shah7.com

GITHUB github.com/nks5295

LINKEDIN linkedin.com/in/neelshah95

SKILLS

LANGUAGES AND TOOLS C, Golang, Python, Java, Shell, Git, AWS, Kubernetes, Docker, PowerShell, Microsoft GPO and AD, Puppet, Salt Stack, LDAP, DNS/DHCP/VPN, pfSense

SKILLS Operating Systems, Virtualization, Containers, Networking, Penetration Testing, Kernel Programming, Reverse Engineering, Malware Analysis, Systems Administration

OPERATING SYSTEMS Linux, Mac, Windows XP, Vista, 7, 8, 10, VMware vSphere, Xen

EXPERIENCES

VMWARE

MTS Cloud Operating Systems Intern | 6/2016 – 8/2016

Worked on VMware [vCenter](#) and [LightWave](#) platform services (PS). My work was with VMDNS, an RFC compliant DNS server (VMDNS) that supports secure DNS update, is compatible with Kerberos realms, and is designed for VMware High Availability (VMHA).

- Redesigned and refactored VMDNS PS to be an RFC compliant DNS server supporting DNS queries and dynamic updates
- Implemented secure dynamic DNS update via GSS/TSIG using GSSAPI and Kerberos as the authentication mechanism
- Worked primarily in C and wrote code which will ship with a future release of vCenter and a future open source release of LightWave

THE GEORGE WASHINGTON UNIVERSITY

Research Assistant | 1/2014 – Present

Conduct research under [Dr. Timothy Wood](#) in the [Cloud Systems Lab](#). Investigate high performance networking and scalable cloud security.

<https://scholar.google.com/citations?user=suw0Yr0AAAAJ&hl=en>

- openNetVM – sdnfv.github.io/onvm
 - Investigate multi-core NUMA aware applications, security implications, and maintain the code repository for both the public and private versions
- Scalable Cloud Security via Asynchronous Virtual Machine Introspection
 - Design malicious attacks and events for our security solution to detect

THE GEORGE WASHINGTON UNIVERSITY

Linux Systems Administrator | 12/2014 – Present

I built, manage, and maintain a Linux cluster that has over 50 nodes.

- Manage services such as DNS, DHCP, Firewalls, Puppet, LDAP, openVPN, pfSense
- Manage cloud and virtualizations solutions such as VMware vSphere, and Xen
- 1G and 10G Networking with Cisco switches, Arista Switches, and Dell Switches

BOOZ ALLEN HAMILTON

Computer Security Engineer | 5/2015 – 5/2016

Design and create security solutions for the Tactical Operations and Incident Response team. Worked alongside the firm's internal Red Team and Blue Team to create tools to increase security visibility.

- Worked with Bro Network Analysis tools to increase network visibility
- Designed tools to leverage WMIC and PowerShell to attack Windows AD architectures
- Web application penetration testing using Burp Suite
- Threat hunting with Carbon Black
- Developed sandboxes to practice attacking enterprise networks

CARNEGIE MELLON UNIVERSITY

Research Assistant | 06/2013 – 08/2013

Conducted research under Dr. Peter Steenkiste and worked on the eXpressive Internet Architecture (XIA). XIA is a next generation Internet Architecture that makes use of intrinsic security, flexible routing, and new protocols. www.cs.cmu.edu/~xia/

ASSOCIATION OF COMPUTING MACHINERY

Treasurer | 05/2014 – Present

An organization that hosts workshops, speaker events, study halls, and community building events to improve the quality of computer science at GWU. acm.seas.gwu.edu

SYSTEMS HACKING CLUB

Leader | 09/2014 – Present

An organization which provides students resources to investigate complex computing systems such as the Linux Kernel, Network Stack, Android OS, etc. www.github.com/GW-SHC

BUFF AND BLUE HAT ORGANIZATION

Vice President | 12/2013 – Present

Offensive and defensive security organization promoting ethical hacking through workshops on reverse engineering, network security, wireless security, and lateral movement.

EDUCATION**THE GEORGE WASHINGTON UNIVERSITY CLASS OF 2017**

Bachelor of Science in Computer Science – Systems and Security Track

ACHIEVEMENTS

22ND GENI ENGINEERING COMPETITION 2nd Place

THE GEORGE WASHINGTON UNIVERSITY R&D SHOWCASE 2016 – Runner up | 2015 – Finalist

DEFCON WIRELESS CTF 23 – 5th place | 22 – 4th place

SHMOOCON WIRELESS CTF 2016 – 2nd Place | 2015 – 5th place