

Objective To obtain a career that incorporates offensive cyber security research

Education	Missouri University of Science and Technology (Missouri S&T)	May 2018
------------------	--	----------

B.S. Computer Science

GPA: 3.2/4.0

M.S. Computer Science

GPA: 3.7/4.0

Certifications **CompTIA Network+**

January 2013

CompTIA Security+

May 2013

Experience

Missouri University of Science and Technology

Rolla, MO

Senior Network Technician

September 2013 - December 2015

- Maintaining network infrastructure
- Configuring multi-layer switches
- Servicing the network related needs of faculty, staff, and students
- Trouble shooting issues in data centers and HPC
- Installing fiber network demarks and assembling modules

TekSystems

Saint Louis, MO

IT Contractor

Summer 2014

- Discussing wants of clients
- Devising a plan to complete goal in allotted time
- Implementing design plan for MERCY off-site locations
- Managing desktop images and system registrations

Computer Skills Skills: Troubleshooting, Malware Analysis, Network Fabrication, Log Analysis, Teaching, System Analysis, Pen Testing

Tools: AutoCAD, MS Office, VMWare, Kali/Backtrack Tools, Volatility, Autopsy, Splunk, Forensic Tools, Networking Software & Hardware Tools

Languages: C++, C, ASM, Shell, Python, HTML, Splunk Queries

Operating Systems: Windows, MacOS, Kali/Backtrack, Linux, Nethunter

Honors & Activities

Former ACM President and Former System Administrator – Association for Computing Machinery
Sig-Sec Officer – Former Chair – Group under ACM specialized in cyber security
Former Cyber Def. Team Captain (M57) – Organize and train the team for competitions, compete in CTFs
SFS Scholar – Cyber Security Master Student Track
Research – RFID Relay attack, prevention devices, android fingerprint data extraction, IoT Security
Sandia & LANL Tracer Fire (First Incident Responder) Competitor – Member of winning team
LANL Cyber Spark Competitor – Member of 1st place team
BSides Saint Louis 2016 & 2017 CTF – Competitor and winner of 1st place
Sig-Security Presenter – Gave talks on worms, botnets, format string vulnerabilities, etc.
CCDC Team Captain & CCDC Competitor – Team Captain and Firewall Admin

Research & Projects

The Security of Radio Frequency Identification Technology: Missouri S&T

- Studied the RFID system used on campus to see if any vulnerabilities existed in the current system
- Researched RFID system exploitation techniques
- Researched defenses to exploitation techniques
- Developed method for relay attacks on school network through android devices

Android Fingerprint Data Extraction

- Extracted data to support further research in password-less authentication systems
- Created local area network to connect to device
- Created android app with reverse shell through Metasploit for remote command execution
- Researched android file and security architecture

Persistent Network Worm

- Uses OSPF like algorithm to check uptime of internal network nodes
- Master node handles all network communications outside of local network to C2 server
- C2 uses datamining techniques to calculate distances between nodes
- Infected nodes re-infect nodes that rejoin network to maintain persistence on local network

Presentations

Completing the Hack – CDT Talk/Lab

February 2016

- Network Enumeration
- Remote exploitation
- Cyber Kill Chain

Virtualization – CDT Talk/Lab

March 2016

- VM creation and usage
- Virtual Box and VMWare Player
- Networking VMs for at home practice with Metasploit and Metasploitable

Operating Systems Assignment Walkthrough – OS Class Lecture

November 2015

- Explained how forensic artifacts were created for assignment
- Went through Cyber Kill Chain and how artifacts connected to each link
- Discussion over what could be found in infected VM created for assignment