

# Michael Helms

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## Goal

Computer Science graduate looking to utilize over seven years of passion for network and application security with the right balance of creative intuition and technical ability for finding and solving security problems.

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## SECURITY SKILLS:

**Penetration Testing:** 7 years of web application penetration testing, including SQL Injection, Cross Site Scripting, Exploiting Broken Access Controls, Command Injection, and Session Hijacking.

**Penetration Testing Tools:** 5 years of Kali Linux and its tools, including Wireshark, BeEF, Nmap, Ettercap

**Security-Enhanced Linux:** 3 years of configuring SELinux on Debian and Arch Linux systems

**Server Stacks:** 5 years combined of Linux/Apache/MySQL/PHP and Linux/Tomcat/JSP hardening

**Static Analysis:** Familiar with Fortify SCA

## GENERAL SKILLS:

**Programing/Scripting/Markup Languages:** Java, C++, Python, Bash, PHP, SQL, JavaScript, HTML

**Microsoft:** 3 years experience with Microsoft Server 2008 and 2012

**Linux:** 9 years combined of Debian, CentOS, Arch, Kali/BackTrack and Fedora configuration

**Virtualization:** 5 years experience with VMWare, VirtualBox, and KVM.

## RELEVANT EXPERIENCE:

### Secure Programing and Penetration Testing

- Identified and exploited security vulnerabilities in a Java web application and developed fixes for the exploits
- Used Fortify SCA to perform Static Analysis on a Java web application and created custom rules to detect false positives

### Network Based Application Development

- Developed a Java Music Store web application in a two person team. Responsible for version control with git, server configuration, and application security.

### Computer Forensics

- Used Forensic Toolkit, FTK Imager, and FTK Registry Viewer to gather and document digital forensic evidence
- Used file carving to detect Steganography and other anti-forensic techniques

### IT Infrastructure II: Design & Practice

- Managed multiple Debian and CentOS Virtual Machines used for DNS services, email servers, web servers, Kerberos and LDAP. Helped troubleshoot and refine outdated versions of lab assignments.
  - Designed a Raspberry Pi cluster with remote wireless control over SSH in a group of 4. Primarily responsible for networking, configuration, and documentation.
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## EDUCATION:

**Bachelor of Software and Information Systems**

GPA of 3.4 in Security related courses

University of North Carolina at Charlotte, Charlotte, NC

Completion Date

05 / 2016

To be Conferred

12 / 2016

## EMPLOYMENT:

**Systems Reliability Engineer Intern – Nutanix**

**Concrete Laborer – International Precast**

October 2016 – Present

Seasonal; 2010/2012