

Alexander Hsu

(571) 447-3121
halex@vt.edu
ashsu@mitre.org

3503 West Ox Road
Fairfax, VA 22033

OBJECTIVE

To find a full time position in the cybersecurity field with a specialization in applying data analytics to network security.

EDUCATION

Virginia Polytechnic Institute and State University, Blacksburg, VA

M.S. Computer Science, GPA: **3.85**

Spring 2019

Master's Thesis: Automatic Internet of Things Device Type Identification using Traffic Rates

B.S. Computer Science, GPA: **3.55**

Spring 2017

University of Bern, Switzerland, Semester Study Abroad

Enrolled Spring 2015

WORK EXPERIENCE

Virginia Tech IT Security Lab, *Graduate Researcher*, Blacksburg, VA

Summer 2015-Spring 2019

- Completed master's thesis on analyzing internet traffic of Internet of Things (IoT) devices
- Supported Graduate students by researching and developing Augmented Reality (AR) security visualizations
- Attended conference to present paper in augmented reality visualization
- Administered and analyzed User Design testing for AR applications
- Migrated VT Converged Security Visualization Tool from Google Earth to Cesium
- Assisted PhD students by researching, testing, and coding stress test for MT6D over a server.
- Maintained and updated logging information using ELK.
- Tagged and sorted system log information from Linux machines using Logstash

MITRE, *Cyber Security Graduate Intern*, Mclean, VA

May 2017-August 2018

- Participated in a Capture the Flag event with other MITRE interns
- Web Development with Spring MVC Framework
- Researched and implement authentication platform for single sign on
- Worked with Gitlab as source control for enterprise development
- Designed D3 visualizations to view and plot result files
- Implemented test framework to automate testing for a web application
- Researched machine learning concepts and applications

DEXISIVE, *Intern*, Reston, VA

Summer 2016-January 2017

- Created an experimental copy of a customer production environment in order to test operating system and server software upgrades while ensuring compatibility.
- Researched data management solutions and recommended a locally managed solution instead of a cloud service for customer needs.
- Configured lab network hardware, DHCP, DNS, and other network services.
- Wrote scripts to backup critical data to run daily.
- Trained and assisted with a course on Reverse Engineering by researching papers and topics for a reverse engineering company.

OTHER ACTIVITIES

- **Hawaiian International Conference for System Sciences**- Presented and co-authored *Mobile Augmented Reality for Cyber Security* in January 2017
- **CyberCorps Scholarship for Service**
- **US Citizen**