

Paul Walko

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EDUCATION

Virginia Tech, GPA: 3.14

Blacksburg, VA

Pursuing Bachelor of Science

2018

Major: Computer Science

Minor: Cyber Security

WORK EXPERIENCE

Cybersecurity Engineering Intern

May 2017 - Aug 2018

Cisco Systems, Security & Trust Organization

RTP, NC

- Developed Linux security module anti-malware for IoT devices
- Hardened Linux systems and kernels
- Analyzed and prevented potential security bugs

Research Assistant – Hume Center at Virginia Tech

Aug 2017 - Dec 2017

Analyzed several TB of network flow data

Blacksburg, VA

- Learned about issues with large data sets
- Built connections between independent data sets

Research Assistant – Hume Center at Virginia Tech

Sep 2016 - May 2017

Created portable, concealable Bluetooth pen-testing device

Blacksburg, VA

- Intercepted data from keyboards, mice, and other BLE devices
- Analyzed data using Wireshark and python to find patterns and vulnerabilities

S.W.A.T Technician

Aug 2016 - May 2017

Virginia Tech College of Engineering

Blacksburg, VA

- Assisted customers with software/OS installation
- Diagnosed installation and network issues

Summer Camp Instructor / Lead Instructor

Summer 2014, 2015

Lincoln Heritage Council, Boy Scouts of America

Clermont, KY

- Taught & supervised at a boy scout summer camp area

PROJECTS

Github: <https://github.com/paulwalko>

Eagle Scout, Troop 306

2013

Virginia Tech Linux/Unix Users Group (VTLUUG)

2017, 2018

Sysadmin

Blacksburg, VA

- **FreeIPA/LDAP** - Maintain accounts for email, shell access, and webserver
- **In process of infrastructure rebuild** - Current plan: https://vtluug.org/wiki/Project_Bringing_Sexy_Back
 - Manage ansible playbok to automate VM deployment: <https://github.com/vtluug/ansible>
 - Manage networking scripts for our network: <https://github.com/vtluug/scripts>
- **Organized funds** - Obtained \$1300 for new servers and equipment, and oversaw purchasing additional components

Geospatial Related Projects

- <https://tinyurl.com/lhcsamap> – Overlay for boy scouts to find information specific to their location
- <https://github.com/paulwalko/cccmmap-dij> – Dijkstra's algorithm implementation for scout camp
- **Google Maps/OSM** – Have contributed a lot to trails and any other errors I've found
- <https://vtluug.org/files/2017/vtbldings/> - Information for all buildings on campus. Planning to extract information from pdf layouts to create floor plan overlay.
- **Refine US Forest Service boundary** – Walk along boundary; record monument condition and a more precise location. Done with Outdoor Club at Virginia Tech (OCVT)