Paul Walko
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EDUCATION

Virginia Tech, GPA: 3.14   *Blacksburg, VA*
Pursuing Bachelor of Science   *2019*
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/lhcbsamap** – Overlay for boy scouts to find information specific to their location
- **https://github.com/paulwalko/cccmap-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/vtbuildings/** - 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)