

EMPLOYMENT

Network Support Engineer Cisco Meraki Apr 2017-Sep 2019

Meraki (meraki.cisco.com): Cloud-Managed Networking Devices

- Supported Cisco Meraki's products: Firewalls, Switches, Access Points, MDM, Cameras, Phone
- Produced clear and detailed customer-facing deliverables, driving issues to completion
- Resolved network issues by capturing and analyzing problem traffic with Wireshark
- Diagnosed bugs for review by engineering and communicated progress to stakeholders
- Leveraged Knowledge in Networking, Python, Ruby, bash, Git, Wireshark, Customer Service

IT Manager Vintners Inn Nov 2015-Apr 2017

- Managed website, network, 20 servers, and IT support for a hotel and event center (150 employees)

SOFTWARE PROJECTS

Multicap: Trigger simultaneous packet captures Sep 2019-Present

- Chrome extension to enable fast iteration on troubleshooting complex networking problems
- Created checkbpf.net to validate [BPF syntax](#) as its being typed for capture filters
- Native binary (go) pipes Chrome downloads as bytestreams to Wireshark
- Utilized: Typescript, JS/CSS/HTML, Go, Chrome APIs, Google Analytics, Stripe

[tshark.dev](#): Packet Analysis with Wireshark's CLI Apr 2019-Present

- Visual roadmap on working with pcaps to point networking neophytes in the right direction
- Read how to Capture, Generate, Fuzz, Edit, Sort, Merge, Reformat, Sanitize, and Analyze packets
- Created searchable 6K+ packet capture database to find interesting packets/protocols
- Utilized: Wireshark, Hugo, bash, JS/CSS/HTML, Go, JQuery, Python, Perl, awk, sed, Google Analytics

[Merlink](#): Meraki L2TP VPN Client Apr 2018-Present

- Problem: Meraki does not a native VPN client for desktop computers, unlike many firewall competitors
- I received many calls about setup problems (and 20% of KB lookups), so I decided to fix it
- Creates a connection between your device and your corporate network behind a Meraki firewall
- Supports Windows, Macos, and Linux devices, and provides packages for each
- Utilized: Python, PyQt5, requests, Travis CI, Powershell, Applescript, bash/nmcli, PyPI, NSIS, FPM

🔗 Open Source Contributions

- ➡ **Termshark** (termshark.io): A terminal user-interface for tshark Go
 - Active contributor and maintainer
- ➡ **Wireshark** (wireshark.org): Network protocol analyzer C
 - Improved code quality by removing over 1000 lines of unnecessary code
 - Fixed Wireshark's CRC6 validator for the MBMS sync header CRC (poly 0x6f)
- ➡ **Pre-commit-hooks** (pre-commit.com): Manage multi-language pre-commit hooks C/bash
 - Created hooks and hook-tests for C linters: clang-format, clang-tidy, and oclint

EDUCATION

Sonoma State University Rohnert Park, CA Jan 2014-May 2016

- **Major**: Mathematics, B.A. (in-major GPA 3.6)
- **Minor**: Computer Science
- **Programming Coursework**: Computer Architecture, Databases, Software Design with Android
- **Math Coursework**: Numerical Analysis, Stats Modeling, Cryptography, Combinatorics, Discrete Math

SKILLS

Expert: Wireshark **Proficient**: Networking, Javascript, Go, Git, Python, Bash **Familiar**: Java, SQL, C