David Dworken

[Redacted] Alexandria, VA 22314 Home:703-836-7509, Cell:571-232-4556 <u>david@daviddworken.com</u> github.com/ddworken

Goals

Double major in Computer Science and Electrical Engineering in college.

Continue to contribute to open source projects and search for vulnerabilities in widely deployed software.

Education

The Maret School: Graduation in 2016

GPA of 3.78
Relevant Classes:

• AP Computer Science

• Independent Computer Science: Rust

Skills

- Proficient with Python and Rust
- Experienced with Bash for scripting
- Experienced with Linux, Windows, Android, and iOS
- Basic knowledge of LaTeX and C++

Previous Work and Experience

Georgetown University (Summer 2015)

Researcher at Georgetown's Computer Science Security Lab

- Wrote custom programs to automatically classify thousands of different proxies' behavior
- Discovered numerous free proxies that maliciously modify traffic
- Compared behavior of free proxies to the behavior of Tor exit nodes

Maret Engineering Team (2012-present)

Team Captain

- Designed, produced, and soldered all electronics to control an underwater robot
- Worked closely with the programming team to create an API to control the robot
- Won Best Design Award at Marine Advanced Technology Education Remotely Operated Vehicle competition

Personal Projects

Hardware Password Manager (Github://ddworken/hardwarePasswordManager)

- Wrote a custom library to allow storage of strings in non-volatile memory (EEPROM)
- Programmed Arduino to output the password by typing it into a computer in a variety of ways to combat keyloggers for added security

Recoverable Secret Generator (Github://ddworken/recoverableSecretGenerator)

- Wrote a Python script to randomly generate a password using an error correcting code that allows for recovery of partially forgotten passwords
- Used hashing algorithms to translate passwords to private/public key pair

Cybersecurity Work

- Reported vulnerabilities to: Western Union, Amazon, eBay, Netflix, MailChimp, Adobe, AT&T, Valve, Dyn, Tumblr, CloudFlare, and many other companies
- Ported WiFi jamming functionality to <u>LANs.py</u>, an MITM tool with thousands of users
- Contributed code to xsscrapy, an open source XSS and SQLi vulnerability scanner
- Helped fix bugs in Let's Encrypt, software that is currently being deployed to increase adoption of SSL through free automatically issued SSL certificates