

## Education

B.Sc: Software Engineering, The Pennsylvania State University May 2015  
Minors: Computer Science  
Management of Information Systems

## Work Experience

**Red Team Associate Consultant**, Mandiant, Denver, CO 2016 - 2017

- Lead calls and worked with clients throughout assessments to ensure satisfaction
- Acted as Technical Lead on web app assessments, Windows AD and network penetration tests, and red teams
- Developed infrastructure and security tools in Python, Javascript, and C# on a per assessment basis

**Secondary Ed. Computer Teacher**, U.S. Peace Corps, Mozambique 2015 - 2016

- Designed a curriculum teaching technical concepts to students and local community members
- Successfully fulfilled organization goals in a highly unsupervised environment
- Created *Mozamblog*, a light weight PHP blogging suite, for use in areas with limited connectivity

**Computer Security Guest Lecturer**, 2014 - 2015

Association for Computing Machinery, Penn State Erie Chapter

- Created weekly lectures pertaining to topics in Information Security, for a group of 70 engineering students
- Lectures ranged from introduction to Python, low level C, and Linux, to penetration testing, explorations of common vulnerabilities such as XSS and Code Injection, and Capture the Flag competitions

**Development Intern**, The Erie City Mission 2014 - 2015

- Performed maintenance and updating tasks on the Mission's 10,000 person MySQL donor database
- Assisted in troubleshooting web server issues, as well as general IT and hardware issues

**Microprocessor Lab Teaching Assistant**, Penn State University, Erie, PA 2014

- Administered labs and tutoring in a 50 person RISC Assembly programming course
- Ran the once weekly labs, and reviewed course topics such as processor concepts and Assembly programming principals

## Additional Projects and Skills

**Founder**, Portcullis Games, Pittsburgh, PA 2017 - Current

- Developed and Released *NCradle: An 80s Synth Adventure* in March 2018
- Coordinated a team of international music producers to create a well reviewed soundtrack
- The game has received translations from English into: Spanish, Portuguese, French, and Russian
- All code for the game has been released fully open source under the BSD3 license

### Network and Computer Security

- Professional experience with security tools: Metasploit, Nessus, Cobalt Strike, PowerSploit, Burp, etc
- Founding member of the Penn State Erie Computer Security CTF Team, notable competitions:
  - NYU's CSAW CTF 2014, Result: 284th of 1173 teams (Voted MVP by team)
  - U of Illinois at Urbana-Champaign CTF 2015, Result: 7th of 228 teams
- Matasano's Microcorruption Embedded CTF, Ranked 782 of 22,000 active users 2016
- Speaker, BSides Denver, presented GreatSCT, an application whitelisting bypass generator 2017

**Erie City Bus Tracking Research Project**, 2013

- Developed web server infrastructure as part of a system to track bus locations for the city of Erie
- Responsibilities included server development, embedded hardware programming, and project planning
- Showcased the project to the city of Erie and Pennsylvania DOT members in August, 2013

## Language Skills

Portuguese: Business Level, 500 hours formal training  
Used for daily living and lecturing a computer education curriculum  
Used professionally working with clients/coworkers in Brazil and Mozambique

Spanish: Conversational,  
Used professionally for communication with bilingual clients/coworkers in Peru and Bolivia