Matthew Niemiec

Website: https://therealpi.net/employer

GitHub: /MANA624/Portfolio

575-495-9205

matthew.niemiec@colorado.edu

Education

University of Colorado at Boulder   May 2015 – December 2020

BS/MS (concurrent) in Computer Science   Overall GPA **3.91**

Minor in Applied Mathematics

Relevant coursework: Network Security, Network Systems, Advanced Operating Systems, Immersive Cyber Defense, Ethical Hacking

Technical Skills

- Coding Languages (strongest first): Python, C, Java, C++, Javascript, MATLAB, Scala
- Other technologies: HTML/CSS, MySQL, Django, jQuery, MongoDB, Git, OpenGL, Flask
- Hands-on security experience: Linux administration, SNORT, proxies, network management, nmap, buffer overflow attacks, Burp Suite, Metasploit, cryptography, SQL injection, OWASP Top 10, and more

Projects

The Real Pi   July 2018-Present

Personal Web Server

- Personal web site on Raspberry Pi on home network
- Applied technical security concepts such as salting, SSL certificates, and access control
- Implemented backend with Python, Flask, Apache, MongoDB, and Let's Encrypt and the frontend with HTML/CSS, Javascript, jQuery, and Bootstrap
- Implemented components include a calendar that stores events and texts reminders, a page that coordinates paying rent with roommates, and an admin panel

LKM Rootkit   Fall 2018

Advanced Operating Systems Project

- Developed root kit, countermeasure, and smarter rootkit from scratch in C
- Learned to research advanced OS concepts through Linux documentation

Data Provenance in Honeypots, Research Project   Fall 2019

- Designed a system that takes commands run in honeypots, maps them using data provenance, and automates responses to those commands on the actual network

Work Experience

Graduate Teaching Assistant   August 2018–Present

University of Colorado Boulder   Boulder, CO

- Taught Intro to Cybersecurity(x2) and Principles of Programming Languages.
- Demonstrated initiative in creating supplemental lessons for students in XSS, SQL injections, applied cryptography, HTML, PHP, Javascript, Scala, and more

Software Engineering Intern   May 2017–August 2018

Northrop Grumman   Aurora, CO

- Worked in an Agile environment to design and develop scalable code
- Used a variety of technologies such as Python, Django, MongoDB, Javascript, and Git to create a data retrieval API and a web-based system status dashboard
- Acquired skills such as risk analysis, meeting user requirements, and presenting work done

Additional Experience

- Active security clearance: TS/SCI
- Languages: English, Spanish
- Extensive tutoring (Data Structures, Intro to CS, ESL, Algebra 1, CAD)
- On leadership with CU Christian Challenge