Matthew Niemiec

Website: https://therealpi.net   575-495-9205
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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
- 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. Username: "employer" password: "hireme123"
- Personal web site on Raspberry Pi on home network
- Applied technical security concepts such as salting, SSL certificates, and access control

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

Distributed File System, Network Systems Project   Fall 2017
- Created a DFS in C that uses TCP to send files to different Linux servers to create redundancy
- Implemented fork to handle concurrent requests between clients

Work Experience

Graduate Teaching Assistant   August 2018–Present
University of Colorado Boulder   Boulder, CO
- Taught Intro to Cybersecurity(x2) and Principles of Programming Languages.
- Tasks include teaching recitation, grading, holding office hours, and managing course structure
- Developed strong communication skills through writing assignments and explaining concepts
- 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