Addy Moran

651 W Mineral Ave. Apt 1516 addymmoran@gmail.com

Littleton, CO https://addymmoran.github.io

Education

Colorado State University, Fort Collins, CO May 2018
Bachelor of Science, Computer Science
Minor, Mathematics

Arizona State University
Masters in Computer Science May 2021

Professional Profile

Relevant Skills:

Languages: Java, Python, C/C++, SQL, Unix/Shell Commands, LaTex, UML
Databases: MySQL, SQLite, MariaDB
Operating Systems: Linux, Windows, OSX
Full Stack Web Development: Flask, CherryPy, Jinja, HTML/CSS, JavaScript, ReactJS
Testing: JUnit
Machine Learning: Linear Regression, Neural Networks
Procedures: Scrum and Agile, Test Driven Development
Applications:
Text Editors: Emacs, Vim, Eclipse, Gedit, Notepad++
Virtualization: VirtualBox, VMWare (Workstation, vSphere), CypherPath, AWS
Networking: Wireshark, nmap
Web Development: Wordpress, Wix
Version Control: GitHub, BitBucket, GitLab, ZenHub
Packages: Microsoft Office Suite, Atlassian Suite

Relevant Undergraduate Classes:

Computer Science: Cyber Security, Operating Systems, Databases, Software Development, Networks, Big Data, Machine Learning
Mathematics: Cryptography, Calculus (I/II/III), Linear Algebra (I/II)

Other Skills:

- Excellent skills working with teams developed through over 3 years of work in service industry and many team projects throughout undergraduate, internship, and within Raytheon as a full time engineer.
- Creative and proactive problem solver
- Dependable worker, able to manage time wisely, balance expectations and meet deadlines developed through working while attending school and carrying a full course load
- Avid learner engaged with self-teaching in Cyber Security field including hacking, encryption, and learning Kali Linux tools

Related Experience

Security Clearance: Secret Interim

Software Engineer May 2018 - Current

- Principle Investigator for an adaptive intrusion detection system for use in embedded communication protocols
- Currently developing a satellite data reduction algorithm that finds interesting patterns within TLE data
- Training
    - Built MIL-STD-1553B and MIL-STD-1760 curriculum for an internal embedded security course.
    - Built cyber curriculum for interns and entry level engineers
- Raytheon CODE Center
    - Conducted Red Hat and Windows hardening exercises
    - Managed automated patch management project where we used machine learning to prioritize required system and application patches
    - Worked with internal Raytheon programs to test for cyber resiliency and provided suggestions on ways to mitigate potential attacks

- Avionic Security Network Mapper
    - Assist in program planning and documentation
    - Design databases to assist in machine learning algorithms
    - Implement additional features to improve user experience

Cyber Security Engineer Intern January 2017 - May 2018

- Avionic Security Network Mapper
    - Received a patent for avionic component identification algorithm
    - Researched known avionic vulnerabilities
    - Assisted in program planning by writing and proofreading system requirements, budget documents, program proposals, and project demonstration documentation
    - Designed a database schema and created UML diagrams to reflect the schema
    - Created the database and wrote database wrapper classes to assist in full stack development
    - Assisted in full stack development to provide intuitive and easy to read results from the avionic data bus device mapping
- GPS
    - Aided in securing systems by writing and deploying hardening scripts
    - Deployed system and application patching to classified and unclassified systems
    - Helped prepare material for weekly cyber security class
    - Wrote a Python program that looks for classified keywords in documents to help prevent data spills
- Assisted Raytheon's Human Resource representatives at the Rocky Mountain Collegiate Cyber Defense Competition (RMCCDC) and Women in Cyber Security conference (WiCyS) by sharing my experiences and advice.

Colorado State University, Fort Collins, CO

Research Assistant, Computer Science September 2016 - January 2018

- IoT Penetration Testing:
    - Created Raspberry Pi network monitor for device classification and security vulnerabilities
    - Analyzed network traffic for vulnerabilities
    - Statically and dynamically analyzing device firmware
- Wrote a Python script that pulls network data and puts the data into a logical structure to help during analysis.
- Created websites for finished research projects
- Wrote Python scripts to test the quality of transferred medical data

Teaching Assistant, *Computer Science* January 2016 - January 2018

- Teach students concepts in Java, Python, HTML, CSS and UNIX
- Coordinate review sessions and create study material to break down complex information into more manageable sections
- Assist professors with curriculum by creating and critiquing homework and labs assignments

Assistant to the Director of Mentoring and Retention January 2016 - January 2017

- Assisted with class scheduling and job assignments for teaching assistants ensuring all classes will be covered each semester

Website Developer, Cell and Molecular Biology August 2016 - October 2016

- Updated current webpage content in WordPress
- Fixed incorrect links and webpages

Teaching Assistant, Middle School Girls Computer Science Summer Camp June 2016

- Created website for program
- Created HTML/CSS and Scratch curriculum

Certifications

Part 107 (Commercial Drone Pilot) Certified February 2019
Certified Ethical Hacker (CEH) November 2018

Activities

Presenting "Hacking Your Day-To-Day Travel" at the Women in Cyber Security Conference (WiCyS) March 2019
Presented on automated patch management at the Ground System Architecture Workshop (GSAW) February 2019
Presented a poster on gathering location data from an Android device at WiCyS March 2017
Participated on the White Team at Rocky Mountain Collegiate Cyber Defense Competition (RMCCDC) March 2017
Presented an Internet of Things (IoT) Poster at September 2016
Rocky Mountain Celebration of Women in Computing

Awards/Patents

Received Raytheon patent for avionic component identification algorithm	March 2018
Received scholarship to attend Women in Cyber Security conference (WiCyS)	March 2018
Received Cisco travel scholarship to Women in Cyber Security conference (WiCyS)	March 2018
Received scholarship from Colorado State University to attend Grace Hopper 2017	October 2017
Received 2nd place in the Undergraduate Poster Competition at WiCyS	March 2017
Received Cisco travel scholarship to WiCyS	March 2017
Received scholarship to attend WiCyS	March 2017

Volunteer Experience

Denver Metro Science and Engineering Fair	February 2019
Girls Day at the Aurora Boys & Girls Club	February 2019
Conifer High School Robotics Club	Fall 2018