

Addy Moran

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Programming isn't about what you know; it's about what you can figure out. —
Chris Pine



Education

- Master's in Computer Science, Arizona State University, May 2021
- Bachelor's in Science, Colorado State University, Major in Computer Science and a Minor in Mathematics, May 2018

Tool Suite

- Security Clearance: Secret Interim
- Programming Languages: Java, Python, C/C++, Unix, LaTeX, UML, SQL
- Databases: MySQL, SQLite, MariaDB
- Operating Systems: Linux, Windows, OSX

- Web Development: Wordpress, Wix, Weebly
- Full Stack Web Development: Flask, CherryPy, Jinja, HTML/CSS, JavaScript, ReactJS, Node.JS
- Automation: Chef
- Procedures: Scrum, Agile, and Test Driven Development
- Applications
 - Text Editors: Emacs, Vim, Eclipse, GEdit, Notepad++, Sublime Text
 - Virtualization: VirtualBox, VMWare, CypherPath, AWS
 - Networking: Wireshark, NMap
 - Version Control: GitHub, GitLab, BitBucket, ZenHub

Work Experience

- Raytheon
 - Cyber Threat Analyst, June 2019 - Current
 - Proactively search for cyber attacks and gaps in security measures by leading hunts, acting as a Threat Hunting SME, and by developing training.
 - Software Engineer, May 2018 - June 2019
 - Principle Investigator for an adaptive intrusion detection system for use in embedded communication protocols
 - Prototyped a satellite data reduction algorithm that finds interesting patterns within TLE data
 - Participated in a cyber rotation program (was one of the engineers chosen from Raytheon's four business units)
 - 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
 - Cyber Security Engineer Intern, January 2017 - May 2018
 - Avionic Security Network Mapper
 - Received a patent for avionic component identification algorithm
 - Assist in program planning and documentation

- Design databases to assist in machine learning algorithms
- Implement additional features to improve user experience
- 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
- Colorado State University
 - Research Assistant, 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, 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

Patents & Awards

- Filed provisional patent for exploiting the hacking process to secure embedded protocols, September 2019

- Filed patent for avionic component identification algorithm, September 2019
- Received 2nd place in the Undergraduate Poster Competition at WiCyS, March 2017

Certifications

- [Certified Ethical Hacker](#)
- [Part 107 Commercial Drone Pilot](#)

Volunteer

- [TraceLabs](#), August 2019 - Present
- Denver Metro Science and Engineering Fair, February 2019
- Girls Day at the Aurora Boys & Girls Club, February 2019

Activities/Presentations

- Presented [Hacking Your Day-To-Day Tavel](#) 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 the Rocky Mountain Collegiate Cyber Defense Competition (RMCCDC), March 2017
- Presented on [the Security of Internet of Things \(IoT\) poster](#) at Rocky Mountain Celebration of Women in Computing, September 2016

Personal Projects

- [Facial Recognition](#)
- [Geolocation](#)

Publications

- [Steganography](#)
- [Hacking Your Day-To-Day Travel](#)
- [IoT](#)

Portfolio

Web Design

Wix/Weebly

- [Custer County Realty](#)
- [Pulcinella Pizzeria](#)

HTML/CSS

- [Backcountry Perspective Photo & Video, LLC](#)

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