Zachary Ryan

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EDUCATION

Robert Morris University — Pittsburgh, PA
Bachelor of Science in Cybersecurity — August 2024- December 2026
Dean's List Recipient

Community College of Beaver County — Monaca, PA
Cybersecurity — Jan 2024 - May 2024
President's List Recipient

SKILLS

Languages: Python | Java | Bash |PowerShell | HTML | CSS | SQL
Technical: Linux | Operating Systems | Digital Forensics | TCP/IP | Networking| Computer Hardware |Docker | Git/GitHub
Conceptual: SIEM | Wireshark | tcpdump | Ethical Hacking | Virtualization | Firewalls | SSL/TLS | Nmap|NIST RMF
Core Competencies: Leadership | Attention to Detail | Verbal Communication |Critical Thinking | Problem-Solving

LICENSES AND CERTIFICATIONS

- **Top Secret Clearance - DOD Issued**
- **Google Cybersecurity Specialization Certificate** [Certificate Link]

EXPERIENCE

United States Navy |Machinist Mate - Nuclear Reactor Department | Norfolk, VA — July 2020 - September 2023

- Operated and maintained nuclear propulsion systems, ensuring safe, efficient, and reliable performance at sea
- Functioned under high-pressure conditions while maintaining strict attention to detail and compliance with safety standards
- Conducted scheduled and emergency repairs on pumps, turbines, valves, and other mechanical systems
- Handled incident response, system monitoring, diagnostics, and secondary nuclear reactor equipment troubleshooting
- Demonstrated teamwork and communication, collaborating with multiple teams to maintain operational standards
- Maintained secure reactor operations by enforcing layered access controls, reviewing system status logs, and detecting abnormal system behavior, ensuring operational continuity, technical resilience, and safety in mission-critical environments

Sewickley BMW/Audi/Porsche Dealership | Car Detailer and Photographer | Sewickley, PA — September 2023 - August 2024

- Leveraged advanced auto detailing techniques to represent Audi, BMW, and Porsche brands at the highest level
- Collaborated with sales and service teams to maintain consistent alignment with customer expectations and brand values
- Detailed luxury vehicles to showroom standards while highlighting key design and performance features

PROJECTS

Port Scanner - Web Application| [Github]

- Developed a web-based TCP port scanner using Flask and Python socket library, allowing users to identify open ports
- Used ThreadPoolExecutor for efficient multi-threaded scanning across port ranges
- Followed ethical guidelines and legal standards for responsible port scanning
- Designed a clean HTML/CSS front-end with Jinja2 for displaying results
- Enforced a 5-second timeout mechanism to restrict scan duration and mitigate system strain and accidental abuse

Docker-Based Segmented Network Environment | [Github]

- Designed a segmented multi-container environment simulating frontend, API, database, and management networks
- Implemented firewall rules using iptables to enforce network access controls between segments
- Created a lightweight monitoring dashboard to visualize network events and security rule effectiveness
- Built an attacker container to demonstrate real-world lateral movement and firewall bypass attempts
- Hardened individual containers by restricting privileges and minimizing exposed services

Password Cracker| [Github]

- Built a Java Swing GUI tool simulating password brute-force attacks and secure password generation
- Implemented SHA-256 hashing and recursive cracking logic with live progress updates
- Added adjustable parameters like max length and charset for cracking flexibility
- Incorporated an option to export generated passwords to a text file for offline use or system setup

CO-CURRICULARS AND ACHIEVEMENTS

- Member of Top Secret Colonials (TSC) - Campus Cybersecurity Club at Robert Morris University (RMU)
- Capture the Flag (CTF) team member at RMU
- Honor Society Nomination - Issued by the National Society of Leadership and Success [Link]