Cristian J Rivera Santiago

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OBJETIVE

Computer Science and Engineering student with a background in cybersecurity, eager to secure a challenging and dynamic position in a fast-paced environment. I am committed to my professional development, constantly seeking to expand my knowledge by staying current with emerging technologies and techniques.

EDUCATION

University of Puerto Rico at Mayagüez, *Mayagüez, P.R.*

Expected Graduation: July 2023

B.A. – Computer Science and Engineering

Concentration GPA: 3.30 / 4.00

Current Academic Year: Senior

EXPERIENCE

Professional Experience

- **Security Engineer COOP Abarca Health PBM (May 2022 – December 2022)**
    - **PAM (Privileged Access Management)**: Experience with implementing and maintaining PAM solutions to secure and manage access to sensitive systems and data and ensure compliance with industry regulations.
    - **IDR (Identity and Access Management)**: Experience with Identity and access management solution, including provisioning, user access, and identity management.
    - **IDS (Intrusion Detection System)**: Experience with implementing and maintaining IDS solutions to monitor network activity and detect potential security threats.
    - **SIEM (Security Information and Event Management)**: Experience with implementing and managing SIEM solutions to collect, correlate and analyze security-related data from various sources to identify and respond to security incidents.
    - **Email Campaigns**: Experience in managing and analyzing email campaigns for educating company employees.
    - **Email Security**: Experience with implementing email security solutions and technologies to protect against spam, phishing, and other email-borne threats.
    - **Networking**: Knowledge of networking concepts and protocols, including routing, switching, and firewalls, and experience with configuring and troubleshooting network issues.
    - **Remote Administration**: Experience with remote administration of systems and applications, including remote access and VPN solutions.
    - **Change management Experience**: Proven experience in managing and implementing change management processes to ensure timely, efficient, and effective deployment of new systems and changes to existing systems.
    - **AI Powered Pen Testing**: Knowledge of AI-powered penetration testing techniques and experience with using machine learning and AI to identify and exploit vulnerabilities in systems and applications.
    - **Vulnerability Management**: Experience with vulnerability scanning and management tools and techniques, and ability to identify and remediate vulnerabilities in systems and applications.
    - **Risk Management and Governance**: Experience in identifying, assessing, and mitigating various types of risks, and understanding how to align security controls with organizational goals.
    - **Threat Intelligence**: Experience in identifying and analyzing emerging threats, understanding how to use threat intelligence feeds to detect and respond to threats, and how to use threat intelligence to improve overall security posture.
    - **Encryption**: Experience with encryption technologies and protocols, including symmetric and asymmetric encryption, key management, and secure communications

Project Experience

- **Software Leader in Mayaguez Aero Design Advanced Class Team (May 2021 – December 2022)**
    - Led the development of a fully autonomous airplane for SAE aircraft competitions against over 50 different universities.
    - Utilized various hardware and software engineering techniques, including mission planning with ArduPilot, use of Pixracer flight controller, MRO GPS, Frsky RX4R receiver and Raspberry Pi's, Arduinos, and Raspberry Pi Picos.
    - Developed and maintained a website for the team, rumaerodesign.com, which helped to showcase the project development.
    - Used programming languages such as Python, C, Angular, ReactJS and HTML to achieve the project goals.
    - Utilized 3D printers and CNC machines to manufacture parts and components of the aircraft.
    - Implemented image processing and computer vision techniques using OpenCV to track and locate targets, which was used to determine longitude and latitude coordinates of the aircraft. This was a key feature in ensuring the autonomous navigation and safe landing of the aircraft.

- **Team Member of Mayaguez Panda Hat Cybersecurity Competition Team (August 2021 – December 2021)**
    - **Cybersecurity Competitions:** Achieved 2nd place on GMIS 2021 Hackathon, gaining valuable knowledge and experience in the cybersecurity field, as well as improving teamwork and communication skills.

SKILLS

Technical Skills

- **Programming languages:**
    - Proficient in Java, Python, C, Bash, HTML, JavaScript, ReactJS, Angular, TypeScript, SQL
- **Hardware:**
    - Experience with microcontrollers including Arduino, ESPs, Raspberry Pi Picos
    - Experience with microprocessors, specifically Raspberry Pi
- **Networking:**
    - Setup and configuring home lab with enterprise equipment.
    - Knowledge in Network traffic analysis
    - Experience with network protocols and concepts (TCP/IP, OSI model, etc.)

- **Computer Forensics:**
    - Experience analyzing logs.
    - Knowledge in Malware analysis
    - Familiar with different forensic tools
- **Cybersecurity:**
    - SIEM/Log Analysis
    - AI Powered Pen testing.
    - PAM (Privileged Access Management)
    - Incident Response and Containment
    - Azure AD and Cloud Security
    - Vulnerability Management
    - Risk Management and Governance
    - Threat Intelligence
    - Encryption

Soft Skills

- **Communication**: Able to effectively communicate with team members, managers, and stakeholders, and explain technical information in a clear and concise manner to non-technical audiences.
- **Problem-solving**: Strong analytical and problem-solving skills with the ability to identify and assess vulnerabilities in systems and develop strategies to mitigate threats.
- **Teamwork**: Experience working well in a team environment, collaborating with other departments such as IT, network operations, and legal.
- **Adaptability**: Flexibility and willingness to adapt to new technologies and changing requirements, and threat landscapes.
- **Time management**: Proven ability to manage time effectively and meet deadlines, with the ability to respond to incidents and vulnerabilities in a timely manner.
- **Attention to detail**: Strong attention to detail, with the ability to identify and prevent errors that can impact the security of an organization.
- **Continuous Learning**: Committed to learning and staying up to date with new developments in security technology, threats, and compliance regulations.
- **Bilingual**: Fluent in both Spanish and English, with the ability to communicate effectively with speakers of both languages and bridge language barriers in a professional setting.

Current Future Work

- **Security+ Certification:** Pursuing Security+ certification to expand my knowledge and skills in the field of cybersecurity and to demonstrate my commitment to professional development.
- **eJPTv2 Certification**: Pursuing eJPTv2 certification to enhance my understanding and proficiency in the realm of cybersecurity and to exhibit my dedication to continued professional growth.

Personal Works

- **Home lab:** Implemented a low-power home server using Ubuntu OS and OpenMediaVault on a Raspberry Pi CM4 with a custom I/O board. Configured and managed Docker containers for media server, music server, VPN and Octoprint for 3D printing. Utilized Portainer to manage and monitor the containers and achieved low energy consumption of around 10 watts while providing robust and reliable services to meet the needs of the household.
- **Discord Bot Developer:** Designed and developed a Discord bot utilizing Open Ai's GPT-3 API for natural language processing, allowing for human-like responses to user prompts. Implemented features such as temperature control for varying levels of creativity in responses. Utilized Python, Git, and Docker for the bot's development and deployment. Developed skills in conversational AI, software development, and containerization.
- **PC Assembly and Maintenance Specialist:** Experienced in building and maintaining custom PCs, including assembling hardware components, troubleshooting and resolving technical issues, and optimizing system performance. Utilized knowledge of computer architecture and hardware to select and assemble components for a high-performance and cost-effective build. Developed skills in problem-solving, technical troubleshooting, and attention to detail.

Related Course work

- **CIIC 3015 (Intro to Computer Programming I)**
- **CIIC 3075 (Foundations of Computing)**
- **CIIC 4010 (Advanced Programming)**
- **CIIC 4020 (Data Structures)**
- **CIIC 4025 (Algorithm Design and Analysis)**
- **CIIC 4030 (Programming Languages)**
- **CIIC 4050 (Operating Systems)**
- **CIIC 5045 (Automata and Formal Languages)**
- **CIIC 4060 (Database Systems)**
- **CIIC 4070 (Computer Networks)**
- **INSO 4101 (Intro to Software Engineering)**
- **CIIC 3081 and CIIC 3082 (Computer Architecture I And II)**
- **INEL 3105 (Electrical Systems Analysis I)**
- **INEL 4115 (Electrical Measurements Lab)**