Eric Kumara

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EDUCATION

Carnegie Mellon University, Heinz College, Pittsburgh   August 2024 – May 2026

Master of Science in Information Security Policy & Management

- 4.0 GPA and Coursework in Statistical Reasoning with R, Network Defenses, Economic Analysis, Introduction to Information Security

University of Michigan, College of Engineering, Ann Arbor   August 2020 - May 2024

Bachelor of Engineering in Mechanical Engineering and Minor in Computer Science

- Volunteered monthly in Dexter Senior Center to assist elderly with tech support and troubleshooting electronic issues, familiar with Windows, Android and Mac Operating Systems

PROJECT

EECS 388 – Intro to Cybersecurity   Jan 2024 – April 2024

- Utilized Ghidra and Assembly to craft ROP Buffer Overflow payloads in C++
- Analyzed network traffic with WireShark and malicious code analysis with Autopsy to locate user agent
- Executed XSS, SQL Injection, Length Extension, MD5 Collision, and Padding Oracle attacks

HackTheBox and Pico CTFs   June 2024 - Present

- Studied HTB Penetration Tester Pathway and CTFs involving Web-Shell PHP payloads, Steganography, Symlinks, Nmap, Networking Principles, API, Proxies, Privilege Escalation, Transferring Files, Metasploit, and Kerberos exploits

AWS T-Pot SSH Honeypot   August 2024

- Launched EC2 as SSH Honeypot to monitor connection properties including location and parameters
- Implemented Security Group restrictions and IAM policies for *least privilege* security principle and best practices

WORK EXPERIENCE

PT. Bima Efisien Solusi Teknik, Jakarta   May 2024 - August 2024

Product Management Intern

- Analyzed purchase order datasets to streamline internal warehouse management system of ~120,000 items by increasing cache size leading to 3% performance improvement in product retrieval time
- Recruited 2 suppliers from Shanghai WaterTech through multiple sales channels leading to 25% YoY Inventory growth of piping spare part line

Hexagon Manufacturing Intelligence, Novi   May 2023 - August 2023

System Validation Intern

- Remodeled an electric-motor steering rack feedback system to reevaluate user experience when driving, leading to 7% more dampening in high speeds and captured 4 operational bugs in Elements software for Quality Assurance compliance

University of Michigan Physics Student Services, Ann Arbor   May 2022 - April 2024

Fluid Dynamics and Physics Instructor

- Led and performed various teaching techniques for 12 students after analyzing learning preferences resulting in a median of A- median in Fluid Dynamics and Physics

LEADERSHIP EXPERIENCE

Automated Lamma Antibody Protein Purification Lead, Ann Arbor   January 2024 - May 2024

- Integrated data from solenoid valves and laser sensors to hardware data processing to ensure protein remains submerged, increasing protein antibody purity from 83% to 87% for research
- Primary point of communication and documented interface, fact-based decision making, requirements gathering and product recommendations for non-technical stakeholders to scale up to 40 instances

GarudaHacks Hackathon, Jakarta and Ann Arbor   August 2022

- Awarded "Best Rural Development Pitch" among 407 participants for leading innovative e-commerce application solution Tuku to support local handicrafts

SKILLS

Technical Skills: Programming (Python/C ++,) Bash, SQL, R, Wireshark, Ghidra, Basic Pen Test, Networking, Firewalls (Pfsense/Endian), IDS (Suricata/Snort), SSL/TLS, HTTPs, Splunk, AWS, Security Standards/Compliance, Infrastructure Design
Interpersonal Skills: Teamwork, Communication, Analytical, Problem Solver, Self-Starter, Project Management
Certification: CompTIA Network+, AWS Cloud Practitioner