

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

- Coursework: Malicious Code Analysis, Network & Internet Security, Cloud Computing, Network Defenses, Software & Security, Introduction to Information Security Management, Professional Speaking
- GPA: 4.0

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 troubleshooting iOS, Windows and Android devices
- GPA: 3.72, graduated with Magna Cum Laude and University Honors

PROJECTS

- **CMU 15-213:** Self-study CMU's *Intro to Computer System*, explored implementation of data types in C, optimized code and good locality, hands-on lab for implementation of cache and ROP attacks, grasped assembly and stack/heap operations
- **Python Password Manager:** Packaged into Docker to use with other devices, connected RedisQL to store credentials, salted username and URL, auto generation of secure password, encrypted entries with AES-128, load balancing with Docker Swarm
- **VM Home lab:** Segmented networks, used Windows AD for DHCP, DNS and NAT, PowerShell script to create 100 users
- **AWS SSH Honeybot:** Launched AWS EC2 Honeybot, enforced security group and IAM rules, exposed to data-driven Kibana SIEM
- **UofM EECS 388:** application OWASP Top 10 familiarity, executed XSS, CSRF and Injection Attacks, conducted Memory and ROP attacks in C, analyzed network with Wireshark, analyzed low level language with Ghidra

WORK EXPERIENCE

PT. Bima Efisien Solusi Teknik, Jakarta

May 2024 - August 2024

Product Management Intern

- Analyzed purchase order dataset of internal warehouse management system of ~120,000 items, 3% faster product retrieval time after increasing cache size
- Led cross team effort to expand piping spare part line, immersed in Chinese culture for public relations, pitched potential vendors to manager, recruited 2 suppliers from Shanghai WaterTech which led to 25% YoY pip inventory growth

Hexagon Manufacturing Intelligence, Novi

May 2023 - August 2023

System Validation Intern

- Remodeled an electric-motor steering rack experiment to reevaluate user experience when driving, captured 4 operational bugs in consumer Elements software, worked closely with QA team where 2 out of 4 bugs were addressed in future patches

University of Michigan Physics Student Services, Ann Arbor

May 2022 - April 2024

Fluid Dynamics and Physics Instructor

- Led Office Hours for Fluid Dynamics and Physics II, conducted personalized teaching methods for 12 students resulting in median of A-, primary point of communication in Piazza to address student's questions.

LEADERSHIP EXPERIENCE

PERMIAS Treasurer, Ann Arbor

July 2022 – April 2024

- Restructured reimbursement system from 5 to 2 days, increased cash reserve by 67% YoY, launched annual tradition of Indonesian Cultural Night post Covid

GarudaHacks Hackathon, Jakarta and Ann Arbor

August 2022

- Developed pitch deque and program management timeline via Gantt Chart, collaborated with designer for product concept, awarded "Best Rural Development Pitch" among 407 participants for e-commerce app *Tuku* to support local handicrafts

SKILLS

Programming: Python, C++, Linux/Bash, SQL, Docker, GitHub, R, MATLAB

Security: Wireshark, IDS(Suricata/Snort), Firewall (Endian/Pfsense), Burpsuite, Kibana, Networking (TCP/IP), Metasploit

Certification: AWS Cloud Practitioner, CompTIA Network+

Languages: Indonesian, English, Mandarin (Limited Proficiency)