

Benhur Tekeste

+971543648338 | benhurtekeste2020@gmail.com | linkedin.com/in/benhur-tekeste/ | benhurtekeste.github.io

EDUCATION

Khalifa University

Bachelor of Science in Computer Engineering (GPA: 3.86/4.00)

Abu Dhabi, UAE

Jan 2019 – Dec 2023

EXPERIENCE

Research Assistant in Cybersecurity and AI

Rochester Institute of Technology, Dubai

July 2025 – Present

Dubai, UAE

- Working and researching on securing AI for Smart Cities in collaboration with Dubai Police
- Currently writing a survey paper to be submitted to IEEE Access

Research Assistant

Khalifa University

Feb 2024 – Jan 2025

Abu Dhabi, UAE

- Researched and developed ML-based routing protocol, QoS-OLSR, to optimize network performance
- Integrated QoS-OLSR protocol with TII-produced Comm Sleeve devices and Hardened OS, significantly bolstering security
- Aligned Mininet-WiFi (SDN emulator) configurations with the physical environment, achieving 95% simulation accuracy
- Enhanced QoS-OLSR protocol by integrating IPv6 functionality, achieving full compliance with IPv6 standards
- Assisted and mentored students in implementing an ML-based QoS-OLSR protocol for their capstone project

PROJECTS

Malware Image Classifier | *Malware Family, Computer Vision, Pytorch, ResNet50*

- Reproduced and implemented a CNN for classifying malware using image-based binary representation of Windows Portable Executable (PE)
- Used the Maling Original Dataset, which converts malware binaries to grayscale images
- Trained and evaluated the ResNet50 model, achieving accuracy of 88.54% on test set
- Explored Google's Secure AI Framework (SAIF) on how to build secure AI Systems
- Project completed as part of the AI Red Teamer path on Hack The Box

IoT Hacking | *TP-Link router, Firmware Extraction and Analysis, OpenSSL, DES Encryption*

- Analyzed the IoT threat landscape
- Identified and conducted OSINT on the surface-mounted chips
- Extracted firmware from ROM using CH341A USB Programmer
- Performed firmware analysis by extracting sections of the firmware and conducting binary analysis
- Reverse-engineered a library to acquire a decryption key and deciphered configuration files

AWARDS AND RECOGNITION

- Secured 2nd place in Cyber Energy Drill during ADIPEC 2023
- Received Sustainability Expert Award during GITEX AI InnovateFest 2023
- Achieved 3rd place in Khalifa University Programming Contest 2023
- Awarded Distinguished Peer Tutor in Fall 2023
- Inducted into Golder Key International Honor Society 2022

PROFESSIONAL CERTIFICATES

- Zero-Point Security - Certified Red Team Operator (April 2025)
- INE Security - eLearn Junior Penetration Tester (June 2024)
- Google - Cybersecurity Professional (Jun 2023)

TECHNICAL SKILLS

Languages: Java, Python, Bash, Powershell, C, SQL

Operating Systems: Linux Distributions, Windows

Forensics: Malware, Firmware, Logs

Security: Burp Suite, Metasploit, Nessus, Wireshark, Splunk, Ghidra, Powershell Empire, Cobalt Strike

Frameworks: Gradio, Flask, LangChain

Developer Tools: Git, Docker, AWS, VS Code

Libraries: Pandas, Matplotlib, TensorFlow, Transformers

Writing and Formatting: MS Office, L^AT_EX