Behnjamin Barlow
Cookeville, TN 38501 | 931-472-9818
Behnjaminhector04@gmail.com | GitHub: github.com/BHBarlow | nightwalker.cv

SFS Scholar:
- In a Degree Path Designated for Cyber Defense Education by the National Centers of Academic Excellence in cybersecurity.

SKILLS:

Technical Skills:
- Linux Hardening, C++, Git, Ansible, Salt Stack, MySQL, JavaScript, Networking, Blockchain, Zero Trust, Web Development, Web Security, Nmap, SliverC2, Reverse Engineering, Ghidra, Python, GoLang, HTML, PowerShell, MongoDB, DNS, Infrastructure as Code (IaC), OpenTofu, HashiCorp CDK (cdktf), Automation, Scripting, Deployment, Configuration Management, Proxmox VE, VMware vSphere, Canonical Microcloud, Hypervisor Management, Virtual Networking, Network Troubleshooting, Network Configuration, Firewall Management, pfSense, VPN, Tailscale, Threat Hunting, Incident Response, SIEM, Red Teaming, Persistence Techniques, Secure Communication Protocols, Linux Administration, Bash Scripting, Hardware Integration, Testbed Design, Front-End Development, Web Portal Development, and Database Security.

Soft Skills:
- Teamwork, Leadership, Problem Solving, Time Management, Critical Thinking, Communication, Initiative, Planning/Organization, and Adaptability

EXPERIENCE:

Internships:

Cyber Range Application Developer:
- Contributed to the development of Infrastructure as Code (IaC) solutions using Python, OpenTofu, and HashiCorp CDK to automate the deployment and management of the CEROC Cyber Range on the Canonical Microcloud hypervisor.
- Engineered custom scripts and modules (Python) to resolve complex virtual networking issues and optimize resource allocation for range users.
- Designed and implemented a front-end portal providing students with intuitive web console access to cyber range resources and environments.
- Worked closely with the Cyber Range Engineer to troubleshoot infrastructure problems and enhance overall system functionality.

Research:

Satellite Security:
- Conducting research in “Zero Trust” security for satellites build off the block chain model.
- Developing encrypted verification methods to ensure trusted communication between company-owned satellites and ground stations.
- Designing a system to dynamically distribute AI models across satellites for on-demand deployment while incorporating load balancing and low power limitations.
- Designed and built a physical testbed simulating a satellite constellation using 10 Jetson Orin devices as satellites and 5 Raspberry Pis as ground stations to model communication and network interactions.

Campus Organizations:

Cyber Eagles:
- President of operations, planning, and member engagement for the university's cybersecurity organization.
- Coordinate and host regular meetings, securing guest speakers from leading technology companies and government agencies.
- Partner with university administration and student organizations to manage budgets, secure necessary funding, and ensure smooth club operations.
- Develop and execute outreach initiatives targeting related academic departments and student interest groups, increasing club visibility and participation.

Defensive Cyber Interest Group:

- I am currently a Defensive Cyber Interest Group team lead, overseeing projects aimed at presenting defensive cybersecurity concepts from backups and personal protection to in depth firewalling and SIEM implementation.
- Managing a vSphere range, and preparing individuals for real world cybersecurity concepts, as well as fostering a collaborative learning environment for students ranging from new to expereinced.

TN Tech CCDC Nationals Team Member 2025:

- My main role for Websites and Databases my part requires knowledge on how web-based application and Databases work with configuring network implementation and user access while proactive threat hunting across web applications to detect and mitigate red team attackers in real time.
- I'm an alternate for Linux systems, as well as Firewalling on Pfsense
- For Linux and firewalls my part requires knowledge with managing firewall systems as well as many Linux systems implementing the following skills: Bash, OS hardening, auditing, SIEM, and Firewall management.
- Created multiple mock CCDC infra consisting of over 16 machines with web, mail, file share, and domain systems configured to be vulnerable with persistence and Red Teaming using SliverC2 and Realm.

Projects:

GoLang Network Mapper:

- Developed a high-performance network scanning tool in Go that automates host discovery and vulnerability assessment using Nmap. The tool supports:
  - Ping Scanning, concurrent Scanning with Goroutines and Wait Groups for improved efficiency and configurable Execution via config.json for dynamic subnet and flags.
- Plans to expand this for tooling in competitive environments integrated with WEB&DB connection mappings.

Personal Website:

- Developed a personal website showcasing my experience, projects, and academia. The site includes an "About Me" section, links to my GitHub and LinkedIn, and detailed insights into my cybersecurity work. Serves as a central hub for my technical portfolio and professional presence.

ESXI Home Lab:

- Manage a home lab environment utilizing ESXI VE for virtualization.
- Utilize the lab for testing scripts, practicing cybersecurity skills, and personal project development.
- Implemented TailScale for secure remote access to the home network and lab resources.
- Developing a web-based Network Attached Storage (NAS) solution using repurposed hardware.
- Utilizing pihole for dynamic DNS resolution of virtual machines.
- Integrating infrastructure upgrades including a Ubiquiti managed switch and UPS for reliability.

EDUCATION:

Tennessee Technological University (NCAE)

Major: Computer Science Bachelor of Engineering|Cybersecurity (Fall 2025) GPA: 3.7
Major: Computer Science Masters of Engineering|Cybersecurity (Fall 2027) GPA: N/A