

SEBJIN KENNEDY

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EDUCATION

Tennessee Technological University
Bachelor's, Computer Science

August 2022 - December 2025
GPA: 3.38

PROFESSIONAL EXPERIENCE

Tennessee Technological University
AI Cyber Researcher

October 2024 - December 2025
Cookeville, TN, USA

- Researched AI model security and adversarial attack techniques, developing hands-on labs and training modules using Python and MITRE ATLAS/ATT&CK frameworks
- Created educational materials and simulations to teach threat modeling, system resilience, and adversarial defense aligned with real-world cybersecurity practices
- Taught faculty from regional universities who integrated the material into their own classes.
- Led 24+ sessions with groups of 20–30 students and faculty, earning 98% average satisfaction.

Tennessee Technological University - Cybersecurity Education, Research, and Outreach Center

February 2024 - December 2025

CEROC Ambassador

Cookeville, TN, USA

- Represented CEROC at events like Infosec Nashville 2024, welcoming sponsors and investors, helping drive strong sponsor and investor return rates.
- Supported outreach for student groups ranging from 5 to 20 participants per session, tailoring discussions to fit different audience sizes and needs.

Tennessee Technological University
DevOps Teaching Assistant

January 2024 - December 2024
Cookeville, TN, USA

- Taught classes of 30+ about topics covering Developer and Operations, Version Control with Git, Virtualization, Bash Scripting, Cloud Development with GCP, Containerization with Docker, Container Orchestration with Kubernetes, and Automation with Ansible
- Drove classes' excellence and participation with personalized tutoring sessions, practical exercises over the above tools, and lectures covering the above topics, all of which lead to a 95% satisfaction rate, with a 100% pass rate

PROJECTS & OUTSIDE EXPERIENCE

Evaluating Energy Efficiency of Cryptographic Algorithms

January 2025 - May 2025

Student

Cookeville, TN, USA

- Implemented and evaluated cryptographic primitives and protocols.
- Analyzed cryptographic efficiency, performance tradeoffs, and real-world applicability.
- Cryptographic algorithms (hashing, symmetric/asymmetric crypto)
- C/C++, Python (analysis), performance benchmarking
- [Link to project](#)

Fitness Buddy

November 2025 - December 2025

DevOps and AI Lead

Cookeville, TN, USA

- Engineered a Fitness Web App to help users manage their health through the use of Qwen 2.5 Instruct
- Helped manage developer and operations side full-stack development using containerization with Docker
- Built automation and test scripts to help QA test the system
- Qwen 2.5 Instruct
- React, Node, Express, SQL stack on mariadb
- Git for version control and CI/CD, Docker
- [Link to project](#)

ARM64 Operating System Project

August 2024 - December 2024

Student

Cookeville, TN, USA

- Implemented core OS components on ARM64, including process scheduling, memory management concepts, and low-level system control.
- Worked directly with hardware-near abstractions and kernel-level logic.
- [Link to project](#)

Secure Mesh Networking for IoT and Critical Infrastructure

January 2025 - May 2025

Student

Cookeville, TN, USA

- Authored a technical paper analyzing secure mesh networking architectures, tradeoffs, and threat models.
- Evaluated security, scalability, and resilience in decentralized network designs.
- Tools / Tech: Network security concepts, threat modeling, academic research
- [Link to project](#)

Infosec CEROC Ambassador

September 2024 - September 2024

CEROC Ambassador

Nashville, TN, USA

- Represented CEROC as an InfoSec conference ambassador, serving as a primary routing and coordination point between staff, security personnel, speakers, and attendees during a live conference day.
- Managed attendee and speaker flow, directing individuals to sessions, staff, or security as appropriate to maintain smooth conference operations.
- Acted as a first-contact liaison, answering technical and logistical questions while escalating issues to staff or security when needed.
- Supported conference security and logistics by ensuring correct access routing and minimizing disruptions in a high-traffic, professional security environment.

Bash Scripting Portfolio

January 2024 - December 2024

DevOps Teaching Assistant

Cookeville, TN, USA

- Developed Bash automation scripts to validate student lab submissions by checking repository structure, builds, and runtime behavior, significantly reducing manual grading effort.
- Created one-command environment bootstrap scripts to install dependencies, verify tool versions, and standardize development environments for new systems.
- Wrote CI-integrated Bash scripts for GitHub Actions to automate builds, container validation, and policy checks using exit codes for pipeline control.

Agentic Security Triage System (Mini SIEM)

March 2026 - March 2026

Security Researcher

Remote

- Designed and built a lightweight agentic AI-powered security triage system that combines deterministic rule-based scoring with LLM reasoning to classify and respond to IAM log events
- Implemented a modular pipeline analyzing login telemetry (geolocation, MFA status, failed attempts, time-of-day) with configurable risk scoring and automated threat enrichment via IP reputation checks
- Integrated AWS Bedrock (Claude Haiku) as the reasoning layer to generate risk classifications and recommended response actions from enriched security event data
- [Link to project](#)

Systems and Networking Portfolio

January 2024 - December 2024

Student

Cookeville, TN, USA

- Built and analyzed systems-level programs involving processes, threading, sockets, and file I/O.
- Implemented networking components using TCP/IP concepts and client-server models.
- Tools / Tech: C/C++, Linux, POSIX APIs, sockets
- [Link to project](#)

Cookeville Police Department Modules

January 2025 - December 2025

DevOps Lead

Cookeville, TN, USA

- Partnered with the Cookeville Police Department and IT team as DevOps lead to deliver three new SaaS features through Agile methodology and GitHub Projects
- Built a Purchase/Repair Request module with approve/deny workflows, streamlining requests and repairs for 45,000+ departmental items.
- Developed a Leave Management System to centralize leave requests and approvals for 200+ employees.
- Implemented an LDAP-based notification service for real-time status updates on all new requests and orders
- Tools / Tech:
- AWS, CI/CD through GitHub Actions, Git Version Control, Shell Script Automation
- SQL/Node.js/Express.js stack

Adversarial Learning Slides

October 2024 - Present

AI Cyber Researcher

Cookeville, TN, USA

- Designed and implemented adversarial attack and defense simulations in Python to study AI model vulnerabilities and resilience
- Applied MITRE ATLAS and ATT&CK frameworks to develop lab content that trains students in analyzing and mitigating real-world adversarial threats
- Tools / Tech: Python, ML, XAI, Jupyter Notebooks, MITRE ATT&CK
- [*Link to project*](#)

Ansible Scripting Portfolio

April 2024 - November 2024

DevOps Teaching Assistant

Cookeville, TN, USA

- Built Ansible playbooks to provision and harden Linux lab environments, enforcing consistent package installs, user permissions, and secure SSH configurations across student VMs.
- Designed idempotent, parameterized roles to automate multi-node lab deployments, reducing environment setup time from hours to minutes.
- Implemented security-focused automation (least privilege, baseline hardening) to demonstrate DevSecOps principles within reproducible infrastructure workflows.

x86 Assembly and Computer Organization Portfolio

January 2024 - April 2024

Student

Cookeville, TN, USA

- Developed assembly-level programs to explore CPU architecture, instruction pipelines, memory addressing, and register usage.
- Strengthened understanding of how high-level code maps to hardware execution
- Tools / Tech: x86 Assembly, GNU assembler
- [*Link to project*](#)

C++ DSA Portfolio

January 2023 - April 2023

Student

Cookeville, TN, USA

- Implemented core data structures and algorithms with emphasis on performance, memory usage, and correctness.
- Applied algorithmic analysis to evaluate time and space tradeoffs.
- Tools / Tech: C++, STL, algorithmic analysis

SKILLS

Skills: DevOps, Cyber, Agile, Git, Linux/Unix, JIRA, Docker, C/C++, Python, R, Rust, SQL, JavaScript, Bash, PowerShell