

Will Nickolson

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EDUCATION

Auburn University, Auburn, AL expected December 2026
Master of Science in Information Systems
Bachelor of Science, Information Systems Management (GPA: 3.58) December 2025
Certifications: *Security+*, *Certified in Cybersecurity*

PROJECTS

Atlas: Blue Team C2/SIEM platform for adversarial exercises. Deploys hardened Go agents across Linux/Windows fleets with real-time detection (2,345 Sigma rules, 19 detection modules, kernel-level auditd), attack chain correlation, and interactive response. FastAPI backend, Preact dashboard, mTLS auth, zero-trust tool vault. 52K LOC across Go, Python, JavaScript. (private repo)
Sentinel: Real-time intelligence dashboard aggregating ADS-B tracking, USNI naval movements, ACLED events, and live camera feeds. Built with a Python scraping/ingestion pipeline, FastAPI backend, and Three.js frontend. (sentinel.axonia.us, private repo)

PROFESSIONAL EXPERIENCE

Auburn University, Samuel Ginn College of Engineering | Auburn, Alabama April 2026 – Current
Center for Artificial Intelligence and Cybersecurity Engineering
Lab Manager – Graduate Assistant

- Architect and maintain a 3-node Proxmox cluster (~96 cores, 600 GB RAM) running a mixed Windows/Linux VM fleet supporting dozens of users for AI and cybersecurity research, coursework, and red/blue team exercises
- Administer lab network and perimeter security: OPNsense gateway, Palo Alto next-gen firewall, and UniFi managed switching with VLAN segmentation and policy enforcement
- Manage FreeNAS storage, jump boxes, and KVM infrastructure providing centralized datasets, VM backups, and secure out-of-band access for researchers

Auburn University | Auburn, Alabama January 2025 – November 2025
Systems & Support – Student Worker

- Built GitHub Actions to securely create a CI/CD pipeline for cronjobs, scripts, and configurations for on-premises Linux servers, helping sync data for 4,000+ AD users daily.
- Migrated legacy APIs to FastAPI, developing scripts to detect deprecated endpoints and prevent 85 issues across 13 repositories.

United States Congress | Washington, D.C. May 2023 – June 2023
Intern

- Created information briefs for the Office's Chief of Staff about varying Cybersecurity developments as well as scripts to emulate password brute forcing software an adversary may use.

LEADERSHIP & INVOLVEMENT

Auburn Ethical Hacking Club, *Vice President, Technical Advisor* March 2023 – Current

- Replicated small enterprise network across 5 Linux and 3 Windows machines with AD (LDAP/Kerberos), DNS, Apache, Nginx, Wazuh, and more via Proxmox. Fully subnetted network behind OPNsense.
- Captain of SECCDC team which competed to defend 25 live Linux/Windows servers against professional red team attacks. Placed 11th in 2025; 8th in 2026, qualifying our team for the 2026 regionals event.

TECHNICAL SKILLS

- Python, SQL, Bash, Metasploit, Burp Suite, Nmap, Hashcat, Aircrack-ng, Kismet, Wazuh, Suricata, Wireshark, Autopsy, Proxmox, OPNsense, Linux, Windows, Excel, Tableau