

MARTIN TOPP

Curriculum Vitae

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SUMMARY

Security practitioner and dual-major Cybersecurity / Criminal Justice honors student at Indiana Tech (May 2027). Incoming Security Consultant at Google Cloud Security in Chicago following a Mandiant Incident Response internship. Background spans incident response and forensics, red team operations, Windows/Active Directory security, and building production infrastructure from scratch: a collegiate cyber team's full stack, a university datacenter, and ClassCloud, a self-hosted VM lab platform used by Indiana Tech courses. Long-term interest in federal cybersecurity and law enforcement.

EDUCATION

Indiana Institute of Technology — Fort Wayne, IN Aug 2024 – May 2027 (expected)
Honors Bachelor of Science in Cybersecurity and Honors Bachelor of Arts and Sciences in Criminal Justice (dual major)

- GPA 3.8; Dean's List, all semesters; Indiana Tech Honors Program; Indiana Tech Leadership Certificate
- Member, National Society of Collegiate Scholars (NSCS), Association for Computing Machinery (ACM), ColorStack
- Senior capstone: Ephemeral Cloud Sandbox — Autonomous Malware Detonation with LLM-Generated Analyst Reporting (see Projects)

Highland High School — Highland, IN Aug 2020 – May 2024
Academic Honors Diploma, Computer Science STEM Honors Pathway | GPA 3.99

- National Honor Society; Science Olympiad; honors and advanced coursework

Our Lady of Grace Catholic School — Highland, IN – May 2020
• Student Government President; National Junior Honor Society President

PROFESSIONAL EXPERIENCE

Google — Google Cloud Security | Chicago, IL Starting June 2027
Security Consultant (full-time offer, L3)

- General offer into the Security Consultant product area following the Mandiant internship; team placement (e.g., Mandiant Incident Response) determined closer to start.

Google — Mandiant Incident Response (Google Cloud) | Chicago, IL May 2026 – Aug 2026
Security Consultant Intern

- Worked live incident response engagements alongside Mandiant consultants on large enterprise intrusions, contributing from the first indicator of compromise through client debriefs rather than a shadowing role.
- Performed host and network forensics: reviewed Windows event logs, EDR telemetry, and endpoint artifacts to reconstruct attack-lifecycle timelines.
- Mapped threat-actor TTPs to MITRE ATT&CK and translated findings into detection content deployed to client EDR platforms.
- Autonomous AI attack research: built and ran end-to-end AI-driven vishing, phishing, penetration testing, and report writing in a simulated environment to evaluate whether an LLM agent can chain reconnaissance, exploitation, and post-exploitation with zero human prompting.

Indiana Cyber Network | Fort Wayne, IN (hybrid) Jan 2026 – Present
Security Analyst (Apprenticeship) *Paused May–Aug 2026 for Google internship*

- Hands-on security analysis and operational support in a regulated cyber-center environment under formal NDA, need-to-know controls, and established security-governance standards.
- Support cyber-center projects, workflows, and client security activities aligned with national security and critical-infrastructure defense objectives.
- Identify and validate security weaknesses through event investigation and attack-path analysis; escalate risk through formal incident-reporting and chain-of-command procedures; operate on-site and via secure VPN.

Indiana Institute of Technology — Talwar College of Engineering & Computer Sciences

Apr 2026 – Present

Cybersecurity Advisory Board Member

- Advise college leadership on cybersecurity curriculum direction, program development, and alignment with industry and workforce demand across offensive and defensive disciplines.
- Review course content, learning outcomes, and certification pathways; bring perspective from competitive cybersecurity, incident response, and infrastructure operations.
- Support mentorship, experiential learning, and competition opportunities; advise on emerging threats, tools, and trends.

Indiana Institute of Technology — Office of Residence Life

Mar 2025 – Present

Lead Resident Assistant & Director of Living-Learning Communities (Mar 2026 – Present); Resident Assistant (Mar 2025 – Mar 2026)

- Lead a staff of 26 community RAs alongside a second Lead RA across nine residence halls; oversee the duty schedule, nightly documentation, and the Contributions/Interactions review workflow (RA Action → Lead Review → Coordinator Review).
- Chair the Recruitment & Hiring Committee and the Social Media & Marketing Committee; direct the Office of Residence Life's social media, newsletters, and marketing distribution.
- Director of FOCUS, Indiana Tech's first living-learning community (Summit Hall): built the programming model, year-long event calendar, budget, welcome and move-in materials, and an RA scenario-training module for the inaugural cohort.
- Built the department's StarRez tooling: Data Subscription automations for C/I routing, Report Generator V2 dashboards (per-resident contact coverage, no-contact reports, team academic panels), ESA health-and-safety inspection templates, and PortalX (resident-facing portal) pages; scoped a historical THD log import.
- Manage RA departmental budgets with Area Coordinators; serve in the professional on-call crisis-response rotation; plan and facilitate RA training sessions (e.g., "Unlocking Your Community").
- As RA (2025–26): fostered a supportive community for 32 residents, ran monthly academic and career programming, and mediated conflicts.

ClassCloud — classcloud.net | Fort Wayne, IN

Sep 2025 – Present

Co-Founder (with Avery Hughes)

- Virtual-machine provisioning and management platform for higher education: instructors bulk-provision course labs from a CSV or LMS; students get browser-based console access (Apache Guacamole / noVNC) with zero local setup or VPN.
- Own infrastructure and security: Proxmox VE clusters, template-based cloning and resource automation, SAML/CAS/Authentik SSO and Microsoft OAuth, role-based access control, network isolation, audit logging, and health checks for 24/7 availability.
- Pilot semester (Fall 2025): 42 students across 2 courses, 1,260+ lab hours (~30 per student), 218 lab hours in peak week, 99.8% uptime, self-hosted in the Indiana Tech student datacenter; ~100 students in Spring 2026.
- 1st place, Indiana Tech Innovation Challenge 2026. Represent the product to university administrators and stakeholders; leading expansion to additional courses and institutions.

Ball Venture Grant — Digital Empowerment for Seniors / Senior Digital Literacy Program, Indiana Tech

Oct 2025 –

May 2026

Program Developer & Research Program Assistant

- Designed and delivered a hybrid senior digital-literacy program: five in-person workshops at the Parkview Family YMCA (computer basics, internet, email, video calling, online safety, smartphone security, AI in everyday life) plus free self-paced online courses.
- Built an AI-powered learning platform that personalized content, tracked learner progress, and provided ongoing support; focused on scam recognition, password hygiene, and personal-data protection.
- Ran outreach: a 26-stop Fort Wayne flyer distribution route and a bulk email campaign via AWS SES.

Indiana Institute of Technology — Talwar College of Engineering & Computer Sciences

Aug 2025 – Aug 2026

Datacenter Engineer

- Operated and maintained the student datacenter supporting academic and cybersecurity lab environments; deployed and configured Dell servers and Cisco networking for segmented lab and production networks.
- Configured and supported the virtualization platform for instructional and research VM workloads; datacenter redesign achieved 99.98% uptime and hosted ClassCloud and competition preparation.

Indiana Tech Cyber Warriors (collegiate cyber defense team) | Fort Wayne, IN

Oct 2024 – Jul 2026

Team Captain (Oct 2025 – Jul 2026); Windows Specialty Lead & Offensive Security Specialist (Mar 2025 – Jul 2026); Windows Specialist (Oct 2024 – Mar 2025)

- Designed and built the team's entire infrastructure from scratch: Proxmox virtualization cluster, Active Directory domain, Authentik SSO, firewalls and network segmentation, AWS resources, and the Windows lab environment (ADDS, NTP, RDS, Windows Admin Center, 30+ GPOs for LDAP/AD hardening).
- As Captain: directed strategy, roster development, and cross-specialty coordination; rebuilt tryouts with pre-planted beacon persistence tasks scored through the Quotient scoring engine; authored the team's Acceptable Behavior Contract (v3.0).
- Organized and directed CCIT 2026, Indiana Tech's first major cybersecurity competition: 17 hosts, 70 scored services, hybrid red/blue format with overnight persistence; wrote the planning document, budget, timeline, tiebreaker hierarchy, and incident response plan.
- Led weekly Windows security training (Active Directory, Group Policy, hardening, incident response); maintained specialty onboarding guides and SOPs; ran monthly drills and red/blue exercises.
- Windows lead in competition: CCDC state champions 2025 and 2026, Midwest Regional champions 2026, 6th place at CCDC Nationals 2026; at 2026 Regionals conducted live incident response against red-team tradecraft including SaltStack C2, WMI persistence, LSA password-filter DLLs, IIS backdoor modules, and rogue AD objects.
- Redesigned techcyberwarriors.org (WordPress, custom CSS; 35% faster load) and the team CTF portal (100+ users); built a local AI knowledge base trained on Indiana Tech and team documentation for competition prep (Sep 2025).

Indiana Institute of Technology — IT Services | Fort Wayne, IN

Sep 2024 – Jan 2026

Information Technology Service Agent (part-time)

- Resolved 100+ tickets per month for 1,500+ students, faculty, and staff: network, wireless, Active Directory, email, MFA/SSO, Microsoft Office, and hardware issues.
- Assisted with campus technology moves, equipment setup, and infrastructure maintenance.

Tomato Bar Pizza Bakery | Schererville, IN

May 2022 – Jan 2026

Senior Cook & Shift Lead (May 2022 – Jan 2026); IT Consultant (Jun 2025 – Jan 2026); Social Media Manager (May 2025 – Jan 2026)

- Supervised 5–8 employees per shift and 500+ orders per shift; trained and onboarded 10+ new hires on food safety, customer service, and operations.
- IT: maintained and hardened internal and guest networks, supported the Toast POS system (terminals, peripherals, admin portal), and repaired ticket printers, switches, routers, and the locally hosted music system.
- Social media: built and ran the Instagram, Facebook, and TikTok strategy (8–12 posts per month), produced photo and short-form video content, and tracked engagement and traffic KPIs.

Our Lady of Grace Catholic School | Highland, IN

Apr 2017 – Present

Website Administrator (Nov 2024 – Present); Volunteer, Tutor & Technology Consultant (Apr 2017 – May 2025)

- Led the full redesign and ongoing administration of olgraceschool.org (WordPress, PHP, HTML/CSS): responsive 10+ page site for 300+ students and families, event calendars, secure login, and security updates.
- Designed and built a student newsroom and content-creation studio (~\$20K in equipment): cameras, capture, audio, lighting, and OBS-based production for a live morning news broadcast every school day, plus a curriculum introducing students to content creation.
- Google Workspace administration: DNS cutover from the previous provider, bulk teacher onboarding, and delivery-restriction policies.
- Designed a school security and emergency-access map for local law enforcement, documenting access points and response procedures, and coordinated between administration and first responders (2024).
- Tutored students in algebra and English writing; monitored aftercare; provided classroom technology support and mass service.

CyberStart America — SANS Institute / National Cyber Scholarship Foundation

2021 – 2023

Participant, national high-school cybersecurity talent program promoted by the Indiana Dept. of Homeland Security (first cybersecurity experience)

- Registered in January 2021 through Highland High School and competed across three seasons of the CyberStart Game (forensics, cryptography, web, Linux, and programming challenges) toward National Cyber Scholarship qualification.

SELECTED PROJECTS

Security & Infrastructure

Ephemeral Cloud Sandbox — Autonomous Malware Detonation with LLM-Generated Analyst Reporting (senior capstone, with Avery Hughes) Sep 2026 – May 2027

- Disposable detonation VMs on Google Cloud, provisioned with infrastructure-as-code inside a strictly isolated network; captured telemetry feeds an LLM pipeline that writes the analyst report. Emphasis on cloud architecture, sandbox design, network isolation, and LLM integration.

Red Team Operator — Southeast Missouri State University CCDC Invitational Jan 2026

- Attacked Windows AD, web applications, FTP, and routing infrastructure: Kerberoasting, AS-REP roasting, SQL injection and file-upload exploitation, password spraying, DCSync, and registry/scheduled-task persistence. Results: 8 initial-access, 6 privilege-escalation, 24 credentials harvested, 12 persistence mechanisms; detected on ~40% of attacks.
mtsaga.net/blog/2026/01/19/red-team-semo-ccdc-invitational/

CCIT 2026 — Indiana Tech Cyber Warriors Competition Jan 2026 – Apr 2026

- Organized and directed Indiana Tech's first major cybersecurity competition: 17 hosts, 70 scored services, hybrid red/blue format with overnight persistence. Wrote the planning document, budget, timeline, tiebreaker hierarchy, and incident response plan; scoring ran on the Quotient engine.

Cyber Warriors Infrastructure & Enterprise Network Environment Oct 2024 – Jul 2026

- Designed and built the team's entire environment from scratch: Proxmox cluster, Active Directory domain, Authentik SSO, firewalls and segmentation, IDS/IPS, VPN, and AWS/Azure resources.

Enterprise SSO Deployment with Authentik Jan 2026

- Deployed Authentik as the single sign-on provider for the Cyber Warriors environment with SAML and OAuth integrations for team services; documented the full deployment in a technical blog post. mtsaga.net/blog/2026/01/18/deploying-enterprise-ss0-authentik/

Team Infrastructure Migration (48-Hour Cutover) Aug 2026

- Planned and executed a migration of the team's hosted services and domain to new infrastructure under a 48-hour deadline; sequenced the cutover by dependency and verified each service before decommissioning the old environment.

Windows Lab Environment Jan 2025 – Mar 2025

- Administered a Windows Server core, a full server, and a workstation: Active Directory Domain Services, NTP, Windows Admin Center, RDS remote applications, and 30+ Group Policy Objects; documented the topology for team training.

Student Datacenter Redesign & Upkeep Aug 2025 – Aug 2026

- Redesigned and maintained the Talwar College student datacenter: Dell servers, Cisco networking, segmented lab and production networks, and the virtualization platform behind course labs. Achieved 99.98% uptime while hosting ClassCloud and competition preparation.

CCDC Tryout Rebuild with Planted Persistence Sep 2025 – Oct 2025

- Rebuilt the Cyber Warriors tryout environment as a live incident-response exercise with pre-planted beacons and persistence tasks that candidates had to find and remove; scoring automated through the Quotient engine.

Cyber Warriors CTF Tryout Portal Sep 2025

- Self-hosted capture-the-flag platform used for team tryouts and training; 100+ registered users.

Quotient Scoring Engine Frontend Redesign Nov 2025 – Jan 2026

- Redesigned the frontend of the Quotient service-scoring engine used for team tryouts and CCIT 2026 scoring.

Linux Terminal Scoring Engine Mar 2025

- Python-based service monitor for SSH, web, DNS, and FTP with a cloud-optimized terminal UI, flashing DOWN status, and CSV logging; designed to run inside a VPC on AWS or Azure.

Active Directory Attack Paths — Research & Write-up Jan 2026

- Lab research and published write-up on modern Active Directory attack chains: AD CS ESC6/ESC16 certificate abuse, PetitPotam NTLM relay, DCSync, Kerberoasting, and the detections and hardening that break each path.
mtsaga.net/blog/2026/01/20/active-directory-attack-paths/

HackTheBox Walkthroughs — Active & Forest Aug 2025 – Oct 2025

- Published step-by-step walkthroughs of the Active and Forest Windows AD machines: SMB enumeration, GPP credential recovery, Kerberoasting, AS-REP roasting, and DCSync to domain admin; ongoing practice on Insane-rated machines.
mtsaga.net/blog/

Platforms & Web

Local AI Knowledge Base for Indiana Tech

Sep 2025

- Scraping, cleaning, and indexing pipeline over Indiana Tech's public site, catalog, and Cyber Warriors documentation; locally hosted model for real-time student Q&A and competition prep.

Senior Digital Literacy Learning Platform

Oct 2025 – May 2026

- AI-assisted learning platform behind the Indiana Tech / Parkview Family YMCA senior digital literacy program: self-paced online courses, workshop materials, and a bulk outreach campaign via AWS SES alongside a 26-stop Fort Wayne flyer route.

mtsaga.net — Portfolio, Blog & Design System

Dec 2024 – Present

- Personal site and technical blog on GitHub Pages/Jekyll: custom design system, Windows-11-inspired UI, full CV page, and write-ups on SSO, AD attack paths, and competition red teaming. Documented the design system and build process in two posts. mtsaga.net

Indiana Tech Cyber Warriors Website Redesign — techcyberwarriors.org

Feb 2025 – Mar 2025

- Led the full WordPress redesign of the team site: responsive layout, modernized structure, 35% faster load time, and streamlined content management for achievements, schedules, and roster.

Our Lady of Grace Catholic School Website — olgraceschool.org

Nov 2024 – Jan 2025

- Led the full redesign and development of the school's public website in WordPress with custom HTML/CSS: responsive 10+ page site for 300+ students and families, event calendars, secure login, and ongoing security updates; coordinated requirements with administration, teachers, and parents.

OLG Student Newsroom & Content-Creation Studio

2026

- Designed, specified, and built a dedicated newsroom and content-creation room for Our Lady of Grace Catholic School with ~\$20,000 of equipment: cameras, capture devices, wireless audio, lighting, and an OBS production workflow. Students produce a live morning news broadcast every school day and learn content creation on professional gear.

FOCUS Living-Learning Community Website Prototype

Jul 2025 – Aug 2025

- Built a WordPress website prototype matched to Indiana Tech's brand and design for the FOCUS living-learning community.

Residence Life Systems & Data

StarRez Automations, Dashboards & PortalX Build

Mar 2025 – Present

- Built the Office of Residence Life's StarRez tooling: Data Subscription automations that route new Contributions/Interactions to Lead Review, a C/I Counts dashboard (per-resident 30-day counts and no-contact report), team academic-risk panels, an ESA Health & Safety inspection template, PortalX resident- and RA-facing pages, and a pilot import of historical housing logs.

RA Accountability Tracker

Aug 2025

- Designed a 27-tab Excel workbook (728 formulas, full conditional formatting) for tracking RA accountability across the full staff for the 2027 academic year.

RA Community Hours Tracker (SharePoint / Teams)

Aug 2025

- SharePoint/Teams tracker for logging and reviewing RA community hours across the RA team.

Cyber Warriors Acceptable Behavior Contract (v3.0)

Sep 2025

- Authored and revised the team's acceptable-behavior contract through version 3.0.

COMPETITIONS & AWARDS

- Collegiate Cyber Defense Competition (CCDC): 6th place, National Finals 2026; Midwest Regional Champions 2026; Indiana State Champions 2025 (state's 11th consecutive title) and 2026 — Windows lead
- US Cyber Games, Season VI US Cyber Open (2026): 22nd overall, 2nd in Forensics, Top-20 credential; invited to the Season VI US Cyber Combine as a top player (withdrew due to time commitment)
- National Cyber League: Spring 2026 Individual Game 24th of ~7,000; Spring 2026 Team Game 42nd (Cyber Warriors Team 1); Fall 2025 Team Game
- BSides Fort Wayne CTF 2026: 1st place, team "TheInterns" (black badge, lifetime pass)
- Indiana Tech Innovation Challenge 2026: 1st place (ClassCloud)
- NCAE Cyber Games 2025: Most Improved Teammate and team MVP; secured DNS infrastructure and hardened configurations against red-team hijacking and exfiltration
- Collegiate Penetration Testing Competition (CPTC) 2025 and University at Buffalo Lockdown — competitor
- CyberStart America 2021–2023 — participant

CERTIFICATIONS & TRAINING

- Cybrary: NIST 800-53r5 Security and Privacy Controls (Jan 2026); Intermediate Data Security (Jan 2026); NIST Privacy Framework (Dec 2025); Cybersecurity Audits (Dec 2025)
- Google AI Essentials (Google)
- Indiana Tech Leadership Certificate
- American Red Cross Adult First Aid/CPR/AED
- FAA TRUST (The Recreational UAS Safety Test) certified drone pilot
- ServSafe Food Handler, National Restaurant Association (Jul 2022)
- Adobe Photoshop CS2, EDUCBA (2024)

TALKS, TEACHING & OUTREACH

- Guest speaker at area middle schools on college pathways and the route from student competitions to a security role at Google (recurring)
- Student panelist, Talwar College Tech Talk on internships and hands-on learning, Indiana Tech (2026)
- Instructor, Senior Digital Literacy workshops, Parkview Family YMCA, Fort Wayne (five sessions, 2026)
- Featured student spotlight, Talwar College newsletter (2026)
- Technical blog at mtsaga.net: enterprise SSO with Authentik; ClassCloud platform design; red-team write-up, SEMO CCDC Invitational; site design system

LEADERSHIP & SERVICE

- Advisor, Indiana Tech Cyber Club (2026 – Present)
- Cybersecurity Advisory Board Member, Talwar College of Engineering & Computer Sciences (2026 – Present)
- Chair, Residence Life Recruitment & Hiring Committee and Social Media & Marketing Committee (2026 – Present)
- Team Captain, Indiana Tech Cyber Warriors (2025 – 2026)
- Student Government President and NJHS President, Our Lady of Grace School; National Honor Society, Highland High School
- Volunteer, Our Lady of Grace School (2017 – 2025): tutoring, aftercare, technology support, mass service

TECHNICAL SKILLS

Security operations: Incident response, DFIR, host and network forensics, log and EDR telemetry analysis, MITRE ATT&CK mapping, detection engineering, threat hunting, SIEM (Splunk), IDS/IPS

Offensive security: Red team operations, adversary emulation, Active Directory attack paths (Kerberoasting, AS-REP roasting, DCSync, AD CS abuse, PetitPotam), web exploitation, persistence, penetration testing, CTF (forensics, crypto, pwn, RE, RF, web)

Windows & identity: Windows Server, Active Directory, Group Policy, LDAP hardening, RDS, Windows Admin Center, privileged access controls, Authentik / SAML / CAS / OAuth SSO

Infrastructure: Proxmox VE, pfSense, Linux (Ubuntu), Cisco networking, Dell servers, AWS, GCP, Azure, virtualization and datacenter operations, Apache Guacamole/noVNC, NetBird/Tailscale, infrastructure-as-code

Programming & tooling: Python, Bash, PowerShell, Java, SQL, HTML/CSS, PHP, WordPress, Wireshark, Git; LLM-driven security automation and knowledge systems

Governance & compliance: NIST 800-53, NIST CSF, NIST Privacy Framework, security auditing, data-handling under NDA and need-to-know controls

Platforms & administration: StarRez (automations, Report Generator V2, PortalX), Google Workspace administration, Microsoft 365, Toast POS