

# Jared Stemper

✉ [JaredAStemper@gmail.com](mailto:JaredAStemper@gmail.com)   [in /Jared-Stemper](#)  
☎ 1.219.286.4440   [📺 /JaredStemper](#)

## EXPERIENCE

**Offensive Security Engineer** September 2024 – Present  
*TikTok USDS* New York, NY

- **Architected & deployed a distributed, event-driven microservices platform** using Golang, Kafka, & Redis, achieving a **98% reduction in runtime** for telemetry collection across millions of nodes.
- **Engineered an extensible, decoupled analysis layer** with Open Policy Agent (OPA) identifying **2,000+ control gaps** in MVP that provided continuous validation & **automated regression testing** against vulnerabilities.
- Orchestrated **CI/CD pipelines** for complex, multi-system deployments & developed custom automation tooling, such as an API-to-Go code generator that accelerated offensive testing workflows.
- Led systemic vulnerability research across production networks and bespoke applications, uncovering critical flaws in complex authentication flows and custom business logic.

**Offensive Cybersecurity Consultant** July 2021 – July 2024  
*RSM US LLP* Chicago, IL

- Performed **red team, physical penetration, & network** penetration testing as a technical lead of the close access and network exploitation teams.
- Mentored and led testing across **web application, LLM/AI** models, wireless network, social-engineering, cloud penetration testing, & configuration review assessments (AWS).
- Developed **Python** and **Tmux** automation framework to streamline **network penetration testing** organization & automating attacks; reducing start-up time by 85% for testers.
- Built modular scanner and reporting utility with **Python** and **Docker** to asynchronously run security tooling, including **AWS** configuration and code review, before consolidating output into standardized findings for reporting.
- Created a long-range **RFID** badge cloner using microcontroller devices with live credential reading through a **Raspberry Pi** wireless AP.
- Provided actionable remediation recommendations to client executives by delivering breach vector reports, enabling risk reduction & minimizing liability exposure for Fortune 10 technology companies, Fortune 500 financial institutions, & private clients.

**Security Software Engineering Intern** May 2020 – Dec 2020  
*Synopsys* Bloomington, IN

- Automated AB-testing analysis through **Python** scripting report comparison, resulting in a 40% reduction in manager analysis time.
- Aggregated assessment data across Netsparker, AppScan, & **BurpSuite** through **Jira** & **PostgreSQL**, facilitating tracking of vulnerability trends.
- Designed & implemented an automated Tableau storyboard for senior managers & C-level to track trends across assessments.

**Penetration Security Consulting Intern** Jun 2019 – Aug 2019  
*RSM US LLP* Chicago, IL

- Supported security engagements in network/web pentesting, developing automation scripts, & assisting NIST CSF compliance assessments.

**Undergraduate Instructor: Intro. to Python Programming** Sep 2018 – Jun 2020  
*Indiana University* Bloomington, IN

- Developed & maintained Python autograding tools while supporting instruction of 200+ students through extensive Python exercises & labs.

## EDUCATION

**B.S. in Computer Science** Aug 2017 – May 2021  
*Indiana University* Bloomington, IN

Relevant Courses: Data Structures, Machine Learning, Relational Databases, Networking, C and Unix, Discrete Mathematics, Linear Algebra

## TECHNICAL SKILLS

**Languages:** Golang/Go, Python, C/C++, SQL, JavaScript, HTML/CSS, Unix Bash  
**Systems/Frameworks:** OPA, RDS, Kafka, Redis, Hertz, FaaS, HIVE  
**Certifications:** PNPT, SANS GPCS, CompTIA CySA+, AWS Certified Cloud Practitioner  
**Security:** Red Team, Internal/External Network, Web Application, Physical, & Social Engineering Penetration Testing  
**Miscellaneous:** AWS, Docker, Containerization, Linux, Tenable Nessus, Forklift-certified, Cobalt Strike

## PROJECTS

**Scylla** 2023 – Present  
• Orchestration and automation tool developed using Bash and Python to support efficient and consistent internal network penetration testing.

**NixOS Hardened Router** 2025  
• Infrastructure-as-code router implementation fethiwaturing default-deny nftables rulesets, stateful packet inspection, IPv6 blocking, & network isolation to support safe adversary simulation and exploit development environments.

**PassMasker** 2024  
• Analyze a list of passwords using novel bucket-sort implementation to improve computation by 40% and provide an analysis of the the passwords into a mask ingestible to hashcat.

**Tor Browser Fingerprinting Research** 2019  
• Measured comparative data sets to determine Tor browser's anti-fingerprinting capabilities and develop an algorithm to bypass controls.

## VOLUNTEERING

**#HashtagLunchbag Volunteer** 2022 – 2024  
• Packed lunches to help prepare meals for Pacific Garden Mission homeless shelter.