David Dworken

Work and Experience

Google

Staff Security Engineer

- Defined team strategy for rolling out modern web security features across 1000+ existing services and mentored colleagues on scaling security rollouts Blog: dworken.com/scaling-security
- Implemented secure-by-design solutions to mitigate prompt injection attacks across Google's AI services
- Collaborated with industry partners through the w3c to bring supply-chain security defenses to the web
- Partnered with the leadership team of one of Google's largest orgs to drive sustainable long-term security improvements and an emphasis on security as a key product differentiator

Senior Security Engineer

- Led security reviews for Google's Privacy Sandbox working closely with Chrome Security to land new secure and privacy-preserving APIs in the web platform
- Built custom secure-by-default tooling to guide new projects into using our secure libraries and frameworks, guaranteeing the elimination of entire classes of vulnerabilities
- Started and maintained a company-wide ticket queue to help engineers with web security questions

Security Engineer

- Developed secure-by-design libraries to replace existing solutions for serving user content focusing on balancing developer ergonomics and security Blog: dworken.com/secure-hosting
- Ran data-driven remediations to find and fix vulnerabilities at scale based on security review findings
- Volunteered to coach GTI, Google's three week long boot camp for new software engineers

Keybase - Software Engineer

• Worked as a full stack developer on a large project using React, React Native, TypeScript, and Go • Created and adopted an open source SSH CA system in Go leveraging Keybase's cryptography protocols Blog: dworken.com/ssh-ca

Datadog - Security Engineer Intern

- Created a secure logging library to automatically redact secrets from over 100 million log lines per day
- Deployed custom static analysis tools to CI/CD pipeline preventing multiple bugs from being deployed

Snap Inc. - Security Engineer Intern

- Engaged in security design reviews with a variety of engineering teams
- Designed and implemented an internal service to defend against supply chain attacks on dependencies

Personal Projects

- Responsibly disclosed critical security vulnerabilities to over three dozen different companies including Google, Microsoft, Github, and Mozilla through their bug bounty programs
- Created a popular OSS tool to sync and query shell history cross-device (github.com/ddworken/hishtory)
 - Implemented end-to-end encryption and integrated with SLSA to support secure software updates
 - Maintained shared syncing infrastructure that has handled over 8 billion entries with minimal downtime

Research & Publications

DEF CON 29 — Worming through IDEs

- Discovered wormable vulnerabilities in IDEs including IntelliJ, Github Codespaces, and VS Code SecWeb 2021 — Understanding Cross-site Leaks and Defenses dworken.com/xs-leaks
- Created a taxonomy for info leak vulns in the web platform in order to better defend against them
- ACSAC 2018 An Extensive Evaluation of the Internet's Open Proxies dworken.com/proxies
- Conducted a long term study of open proxies and tor exit nodes in order to measure malicious behavior

Education

Northeastern University: 2016 - 2020, GPA: 4.0/4.0Bachelors of Science in Computer Science

Programming Languages

- Proficient with Python, Java, Go, and SQL
- Working knowledge of JS and TS

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(2020 - Present)

(2023 - Present)

(2021 - 2023)

(2020 - 2021)

(June 2019 - Apr. 2020)

(Jan. 2019 - May 2019)

(Jan. 2018 - May 2018)

dworken.com/defcon