

JONATHAN TROWBRIDGE

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[LinkedIn](#) | [GitHub](#) | [TryHackMe](#) | [Hack The Box](#)

CAREER SUMMARY

Principal software engineer with over 10 years of experience building mobile, web, and backend systems in production environments. Brings deep understanding of application architecture, authentication flows, APIs, backend services, and trust boundaries, along with the ability to identify and clearly communicate real security risk. Now pursuing penetration testing roles, backed by hands-on offensive security training through the OSCP+, GPEN, GCIH, GSEC, GFACT, and practical lab and CTF experience.

CERTIFICATIONS & EDUCATION

Offensive Security Certified Professional (OSCP+) OffSec	2025
GIAC Penetration Tester (GPEN) SANS Technology Institute	2025
GIAC Certified Incident Handler (GCIH) SANS Technology Institute	2025
GIAC Security Essentials (GSEC) SANS Technology Institute	2025
GIAC Foundational Cybersecurity Technologies (GFACT) SANS Technology Institute	2024
Undergraduate Certificate in Applied Cybersecurity SANS Technology Institute	2025
Bachelor of Science in Computer Science Virginia Commonwealth University	2013

SECURITY TRAINING & HANDS-ON EXPERIENCE

- Completed hands-on offensive security training through the OSCP+, GPEN, GCIH, GSEC, and GFACT, with experience in enumeration, exploitation, privilege escalation, pivoting, and adversary-minded assessment.
- Strengthened practical skills through TryHackMe and Hack The Box across Linux and Windows environments, including service enumeration, exploitation, and post-exploitation workflows.
- Applied software engineering experience during labs and exercises to analyze backend behavior, authentication flows, trust boundaries, implementation weaknesses, and misconfigurations while documenting findings clearly.

PROFESSIONAL EXPERIENCE

- Lead Principal Software Engineer** | Coinme | Seattle, WA (Remote) Sept. 2021 - Oct. 2024
- Led the end-to-end migration of Coinme's native iOS and Android applications to Flutter, modernizing the mobile platform while working across client and backend boundaries that included authentication, onboarding, payments, and other security-sensitive user flows.
 - Designed and implemented a scalable application architecture using Riverpod, enabling maintainable, testable, and modular code to support rapid feature growth.
 - Directed key engineering initiatives including onboarding, mentorship, and team process improvements enhancing team productivity, consistency, and long-term scalability of development efforts.

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Senior Full Stack Software Engineer | CoStar Group | Richmond, VA (Hybrid) Jan. 2019 - Aug. 2021

- Led development of a commercial real estate listing module for Android, along with the supporting ASP.NET Core Web API, delivering a seamless end-to-end solution used across platforms.
- Built and maintained scalable web applications with React, .NET, and Node.js, and developed a reusable .NET Core AWS push notification system adopted across the organization to support real-time, cross-platform communication.
- Collaborated cross-functionally with design, product, and engineering teams to deliver intuitive user experiences and ensure consistent, high-quality feature releases across mobile and web.

Full Stack Software Engineer | Mapleton Hill Media | Boulder, Colorado Aug. 2016 – Feb. 2018

- Built cross-platform iOS and Android applications using Xamarin Native and Xamarin Forms, delivering custom mobile solutions across industries including skiing, agriculture, and logistics.
- Developed and modernized backend systems with ASP.NET and Azure Mobile App Services, including migrating monolithic APIs to modular services and implementing robust unit testing.
- Engineered real-time inventory and shipping synchronization within a cross-platform mobile application, using advanced PCL code and LINQ queries to streamline data flow across distributed devices and APIs.

Full Stack Application Developer | Worldview Solutions Inc. | Richmond, VA Feb. 2013 – Feb. 2016

- Led implementation of claims-based authentication and user management systems for government applications, including a secure recruiting portal for the U.S. Air Force, enhancing access control and compliance.
- Developed environmental and conservation-focused modules for Virginia state agencies using Backbone, Marionette, and ASP.NET Web API, improving regulatory workflows and monitoring efficiency.
- Modernized legacy web applications, including migrating from jQuery to Dojo, resulting in improved performance, user experience, and maintainability.

TECHNICAL SKILLS

Languages: Kotlin, Java, C#, Python, TypeScript, JavaScript, Dart, Bash, PowerShell

Cross-Platform & Mobile: Kotlin Multiplatform, Flutter, Xamarin, Android, iOS

Backend & Web: Ktor, ASP.NET Core, Node.js, React, Angular

Databases: Microsoft SQL Server, SQLite, MongoDB, PostgreSQL

Cybersecurity: Penetration Testing, Vulnerability Assessment, Web Application Security, API Security, Network Security Testing, Threat Modeling, Security-Focused Code Review