Collin Jackson

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WORK EXPERIENCE

MobileCoin / Staff Software Engineer

2022 – 2023 • San Francisco, CA

• Developed a cryptocurrency mobile wallet, moby.app, using Flutter.

Noom / Staff Software Engineer

2020 - 2022 • New York, NY

- Feature development for an iOS and Android mobile app with an install base of millions.
- Improved team productivity through the introduction of time-related testing abstractions.

Google / Staff Software Engineer

2005, 2007, 2008, 2015 - 2020 • Mountain View, CA

- Tech lead for FlutterFire, a plugin suite connecting Google's Flutter dev framework to Firebase backends.
- Supported launch of Flutter's first major Firebase customer, Hamilton, with >1M installs.
- Top 500 Stack Overflow contributor, supporting the Flutter community with hundreds of code samples.

Apportable / Founder and CEO

2010 - 2015 • San Francisco, CA

- Founded and led a 70-person developer tools company.
- Raised \$13M in investment from institutional and angel investors.
- Steered the company through acquisition by Google.

Carnegie Mellon University / Assistant Research Professor 2009 – 2012 • Moffett Field, CA & Pittsburgh, PA

- Led research to improve browser security while supervising Ph.D. and masters students.
- Co-inventor of HTTP Strict Transport Security (HSTS), a widely deployed web security standard.

Betable / Frontend Engineer

2008 - 2010 • San Francisco, CA

- Implemented web front-end for an early-stage startup using Ruby on Rails and AWS.
- Used semantic HTML, CSS, and JavaScript to develop a maintainable, cross-browser web application.
- Evangelized agile technical process including continuous integration and peer code reviews.

Cooliris / Software Engineering Consultant

2006 – 2010 • Palo Alto, CA

Added 3D media viewer support for Firefox and Google Chrome. Company was acquired by Yahoo!

Department of Homeland Security / Privacy Technology Analyst Intern

2005 • Alexandria, VA

• Contributed to internal guidelines for adding more privacy protections to government technology.

Center for Democracy and Technology / Security Research Consultant

2004 – 2005 • Washington, DC

• Investigated fraudulent websites and malicious software, compiling evidence for lawsuits.

Wizards of the Coast / Web Application Developer Consultant

2004 - 2008 • Renton, WA

• Designed, developed, and maintained community-oriented public web applications.

EDUCATION

Ph.D., Computer Science, Stanford University (2009) GPA: 4.0

Dissertation: Improving Browser Security Policies

M.S., Computer Science, Stanford University (2008) GPA: 4.0

B.S., summa cum laude, Yale University (2004) GPA: 3.98

with distinction in the Computer Science major and the Mathematics and Philosophy major

TEACHING

- Browser Security (2010, 2011)
- Web Application Security and Privacy (2010, 2011)
- Web Programming and Security (2009)
- Computer and Network Security (2007, 2008)

Instructor, CMU 96834 Instructor, CMU 96831 Co-Instructor, Stanford CS142 Teaching Assistant, Stanford CS155

AWARDS

- Mozilla Security Award (2008, 2009, 2010)
- Computerworld Horizon Award for Cutting Edge Technologies (2006)
- National Science Foundation Graduate Research Fellowship (2004 2007)
- Yale University Undergraduate Prize in Computer Science (2004)

PATENTS

- Browser system and method for warning users of potentially fraudulent websites (Google)
- Secure cross-domain communication for web mashups (Microsoft)
- Protection and communication abstractions for web browsers (Microsoft)

SELECTED RESEARCH

- Emily Stark, Lin-Shung Huang, Dinesh Israni, Collin Jackson, and Dan Boneh. The case for prefetching and prevalidating TLS server certificates. In Proc of the 19th Network & Distributed System Security Symposium (NDSS 2012).
- Eric Y. Chen, Jason Bau, Charles Reis, Adam Barth, and Collin Jackson. App Isolation: Get the Security of Multiple Browsers with Just One. In Proc of the 18th ACM Conference on Computer and Communications Security (CCS 2011).
- Zack Weinberg, Eric Chen, Pavithra Ramesh Jayaraman, and Collin Jackson. I Still Know What You Visited Last Summer: Leaking browsing history via user interaction and side channel attacks. In Proc. of the IEEE Security and Privacy Symposium (Oakland 2011).
- Lin-Shung Huang, Zack Weinberg, Chris Evans, Collin Jackson. Protecting Browsers from Cross-Origin CSS Attacks. In Proceedings of the 17th ACM Conference on Computer and Communications Security (CCS 2010).
- Gaurav Aggarwal, Elie Bursztein, Dan Boneh, and Collin Jackson. An Analysis of Private Browsing Modes in Modern Browsers. In *Proceedings of the 19th USENIX Security Symposium*. (USENIX Security 2010).
- Daniel Bates, Adam Barth, and Collin Jackson. Regular Expressions Considered Harmful in Client-Side XSS Filters. In *Proceedings of the 19th International World Wide Web Conference.* (WWW 2010).
- Adam Barth, Collin Jackson, and John C. Mitchell. Securing Browser Frame Communication. In *Communications of the ACM (CACM 2009)*.
- Collin Jackson, Adam Barth, Andrew Bortz, Weidong Shao and Dan Boneh. Protecting Browsers from DNS Rebinding Attacks. In ACM Transactions on the Web (TWEB 2009).
- Adam Barth, Collin Jackson, and John C. Mitchell. Robust Defenses for Cross-Site Request Forgery. In *Proceedings of the 15th ACM Conference on Computer and Communications Security (CCS 2008).*
- Adam Barth, Collin Jackson, and John C. Mitchell. Securing Browser Frame Communication. In *Proceedings of the 17th USENIX Security Symposium (USENIX Security 2008)*.
- Collin Jackson and Adam Barth. ForceHTTPS Cookies: A Defense Against Eavesdropping and Pharming. In *Proceedings* of the 17th International World Wide Web Conference (WWW 2008).
- Helen J. Wang, Xiaofeng Fan, Jon Howell, and Collin Jackson. Protection and Communication Abstractions for Web Browsers in MashupOS. *In Proceedings of the 21st ACM Symposium on Operating Systems Principles (SOSP 2007)*.
- Collin Jackson, Adam Barth, Andrew Bortz, Weidong Shao, and Dan Boneh. Protecting Browsers from DNS Rebinding Attacks. In Proceedings of the 14th ACM Conference on Computer and Communications Security (CCS 2007)
- Collin Jackson and Helen J. Wang. Subspace: Secure Cross-Domain Communication for Web Mashups. In *Proceedings* of the 16th International World Wide Web Conference (WWW 2007).
- Collin Jackson, Andrew Bortz, Dan Boneh, and John C. Mitchell. Protecting Browser State from Web Privacy Attacks. In Proceedings of the 15th International World Wide Web Conference (WWW 2006).
- Blake Ross, Collin Jackson, Nick Miyake, Dan Boneh, and John C. Mitchell. Stronger Password Authentication Using Browser Extensions. In *Proceedings of the 14th USENIX Security Symposium (USENIX Security 2005)*.