Braden L. Crimmins

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I conduct research at the intersection of law and computer technology. My legal research focuses on questions about how the law should govern existing and emerging technologies, with a focus on privacy or security issues. My computer science research focuses on public-interest cybersecurity and the application of tools from various fields to provide principled security under practical constraints; this work focuses largely but not exclusively on elections.

Education

University of Michigan 2023 - Present
Ph.D. Student | *Computer Science*

- Focus Area: Public Interest Cybersecurity
- Advisor: Dr. J. Alex Halderman

Stanford University 2023 - 2026
Juris Doctor | *Law*

- Knight-Hennessy Scholar

University of Michigan 2022 - 2023
Master of Science in Engineering | *Computer Science*

University of Michigan 2019 - 2022
Bachelor of Science in Engineering | *Computer Science*

Honors and Awards

- **EVN Research Award** for research advancing the security of U.S. elections (2026)
- **ICS Harvey J. Greenberg Research Award** for "Improving the Security of U.S. Elections with Robust Optimization" (2025)
- **Best Paper Award** in the 33rd USENIX Security Symposium for "DVSorder: Ballot Randomization Flaws Threaten Voter Privacy" (2024)
- **First Place** in University of Michigan CSE Honors Competition (2024)

Experience

Founder & Manager 2024 - Present
BallotIQ, LLC | Ann Arbor, Michigan

- Under contract with State of Michigan to improve pre-election testing of voting equipment.
- Developed novel approaches to detect errors in ballots or in ballot tabulator configurations.

Editor-in-Chief 2023 - 2025
Stanford Technology Law Review | Stanford, California

- Selected and edited articles for the Stanford Technology Law Review.
- Formerly Lead Editor, Articles Editor, & Member Editor

Technology Fellow Summers 2023 & 2024
Department of Justice, Office of Legal Policy | Washington, D.C.

- Served as inaugural technology fellow in the Department of Justice.
- Briefed Attorney General Garland on findings and recommendations.

Publications

Refereed Conference Publications

[1] **DVSorder: Ballot Randomization Flaws Threaten Voter Privacy.**
Braden L. Crimmins, Dhanya Y. Narayanan, Drew Springall, & J. Alex Halderman
33rd USENIX Security Symposium, Aug. 2024.
Acceptance rate: 17%, 382/2176.
Best paper award.

[2] **Logic and Accuracy Testing: A Fifty-State Review.**
Josiah Walker, Nakul Bajaj, Braden L. Crimmins, & J. Alex Halderman
7th International Joint Conference on Electronic Voting (E-Vote-ID), Oct. 2022.
Acceptance rate: 29%, 10/35.

Peer-Reviewed Journal Publications

[3] **Improving the Security of United States Elections with Robust Optimization.**
Braden L. Crimmins, J. Alex Halderman, & Bradley Sturt
Operations Research 73(1):61-85, January-February 2025.
Harvey J. Greenberg Research Award.

Legal Scholarship

[4] **The Forgotten Paper Record Requirement of the Help America Vote Act**
Braden L. Crimmins
28 MINN. J.L. SCI. TECH. (forthcoming 2027)

Refereed Workshop Publications

[5] **RemoteVote and SAFE Vote: Towards Usable End-to-End Verification for Vote-by-Mail.**
Braden L. Crimmins, Marshall Rhea, & J. Alex Halderman
7th Workshop on Advances in Secure Electronic Voting, Financial Cryptography, May 2022.

Selected Legal and Regulatory Filings

[6] **Voter Privacy and VVSG 2.0**
Braden L. Crimmins, Dhanya Narayanan, J. A. Halderman, & Drew Springall
Public comments in response to U.S. Election Assistance Commission's annual review of the Voluntary Voting System Guidelines, June 6, 2023

[7] ***Snap Inc. v. Superior Court of San Diego County* Amicus Brief**
Steven M. Bellovin, Laura K. Donohue, Susan Freiwald, Eric Goldman, Paul Ohm, Riana Pfefferkorn, & Daniel J. Solove, *amici curiae*.
Phillip R. Malone, Nina K. Srejovic, Braden L. Crimmins, Selina Li, *counsel for amici curiae*.
Submitted to California Supreme Court, February 24, 2025.

Patents

[8] **Robust Logic & Accuracy Testing**
Braden L. Crimmins, J. Alex Halderman, & Bradley Sturt
U.S. Patent No. 12,500,922, issued Dec. 2025.

[9] **Single-Ballot Logic & Accuracy Testing**
Bradley Sturt, J. Alex Halderman, & Braden L. Crimmins
U.S. Patent No. 12,488,646, issued Dec. 2025.

Speaking

Selected Talks

- **Robust Logic & Accuracy Testing.** State Certification Testing of Election Systems National Conference (SCTESNC), June 13, 2023.
- **DVSorder and Challenge of Election Coordinated Vulnerability Disclosure.** EVN Conference, Washington, D.C., March 17, 2023; State Certification Testing of Election Systems National Conference (SCTESNC), June 13, 2023.

Selected Panels

- **Panelist, Ballots & Bytes: Technology for Elections.** Stanford Democracy Day, Stanford, CA, November 4, 2025.
- **Panelist, Digital Democracy for All: Accessibility and Security in Voting.** EVN Conference, Washington, D.C., March 19, 2024.

Teaching Experience

University of Michigan

- Graduate Student Instructor, Election Cybersecurity (EECS 498) — Fall 2026

Academic and Volunteer Service

In-Person Workshop Chair, *7th Workshop on Advances in Secure Electronic Voting*, at Financial Cryptography. — May 2022

Poll Worker & Absent Voter Counting Board Member, State of Michigan. — Repeated

Last updated in September 2026