Education

**PhD, Computer Science, Cornell University, Ithaca, NY**
Dissertation: *Mechanisms for Provable Integrity Protection in Decentralized Systems*
Advisors: Andrew C. Myers and Ari Juels
2015 – 2021

**MS, Computer Science, Cornell University, Ithaca, NY**
2019

**ScB, Mathematics – Computer Science, Brown University, Providence, RI**
2008 – 2012

Academic Appointments

**University of Wisconsin–Madison, Madison, WI**
Assistant Professor, Department of Computer Sciences
2023 – Present

**University of Maryland, College Park, MD**
Maryland Cybersecurity Center (MC2) Postdoctoral Fellow
2021 – 2023

Industry Employment

**VMware, Palo Alto, CA** – Research Intern
2019

**TripAdvisor, Needham, MA** – Software Engineer
2012 – 2015

**Google, Cambridge, MA** – Software Engineering Intern
2011

Awards and Honors

**Distinguished Paper Award**, European Conference on Object-Oriented Programming (ECOOP) 2023

**Best Paper Award**, IEEE Symposium on Security and Privacy (S&P) 2021

**Best Paper Award Finalist**, ACM Conference on Computer and Communication Security (CCS) 2017

**National Defense Science and Engineering Graduate (NDSEG) Fellowship** 2017

**Outstanding Teaching Assistant**, Cornell University, Department of Computer Science Fall 2015

**Senior Prize**, Brown University, Department of Computer Science 2012

Conference and Journal Publications

*Computationally Bounded Robust Compilation and Universally Composable Security*
Robert Künemann, Marco Patrignani, Ethan Cecchetti
[doi.org/10.1109/CSF61375.2024.00024] CSF 2024

*Semantics for Noninterference with Interaction Trees*
Lucas Silver, Paul He, Ethan Cecchetti, Andrew K. Hirsch, and Steve Zdancewic
 gubernatorial
[doi.org/10.4230/LIPIcs.ECOOP.2023.29] ECOOP 2023
Compositional Security for Reentrant Applications

Ethan Cecchetti, Siqiu Yao, Haobin Ni, and Andrew C. Myers

*S&P 2021

Best Paper Award

[arxiv.org/abs/2103.08577]

Giving Semantics to Program-Counter Labels via Secure Effects

Andrew K. Hirsch and Ethan Cecchetti

PACMPL (POPL 2021)

[doi.org/10.1145/3434316]

First-Order Logic for Flow-Limited Authorization

Andrew K. Hirsch, Pedro H. Azevedo de Amorim, Ethan Cecchetti, Ross Tate, and Owen Arden

CSF 2020

[doi.org/10.1109/CSF49147.2020.00017]

PIEs: Public Incompressible Encodings for Decentralized Storage

Ethan Cecchetti, Ben Fisch, Ian Miers, and Ari Juels

CCS 2019

[doi.org/10.1145/3319535.3354231]

Obladi: Oblivious Serializable Transactions in the Cloud

Natacha Crooks, Matthew Burke, Ethan Cecchetti, Sitar Harel, Rachit Agarwal, and Lorenzo Alvisi

OSDI 2018

[arxiv.org/abs/1809.10559]

Nonmalleable Information Flow Control

Ethan Cecchetti, Andrew C. Myers, and Owen Arden

CCS 2017

Best Paper Award Finalist

[doi.org/10.1145/3133956.3134054]

Solidus: Confidential Ledger Transactions via PVORM

Ethan Cecchetti, Fan Zhang, Yan Ji, Ahmed Kosba, Ari Juels, and Elaine Shi

CCS 2017

[doi.org/10.1145/3133956.3134010]

Town Crier: An Authenticated Data Feed for Smart Contracts

Fan Zhang, Ethan Cecchetti, Kyle Croman, Ari Juels, and Elaine Shi

CCS 2016

[doi.org/10.1145/2976749.2978326]

Workshop Publications

Securing Smart Contracts with Information Flow

Ethan Cecchetti, Siqiu Yao, Haobin Ni, and Andrew C. Myers

FAB 2020

[scfab.github.io/2020/]

[cecchetti.sites.cs.wisc.edu/papers/ifc-contracts-fab20.pdf]

Patents

Authenticated Data Feed for Blockchains

Patent No.: US-11829998-B2

Issued: 2023-11-28

Owner: Cornell University

Inventors: Fan Zhang; Ethan Cecchetti; Kyle Croman; Ari Juels; Runting Shi
Professional Service

Conference Program Committees
- USENIX Security 2025 [www.usenix.org/conference/usenixsecurity25]
- IEEE S&P (Oakland) 2024 [www.ieee-security.org/TC/SP2024/]
- OOPSLA 2023 (External Review Committee) [2023.splashcon.org/track/splash-2023-oopsla]
- OOPSLA 2022 (External Review Committee) [2022.splashcon.org/track/splash-2022-oopsla]

Workshop Program Committees
- PLAS 2024 [plas24.github.io]
- FCS 2024 (PC co-chair) [fcs-workshop.github.io/fcs2024/]
- Choreographic Programming (CP) 2024 [pldi24.sigplan.org/home/cp-2024]
- PLAS 2023 [plas23.github.io]
- FCS 2023 (PC co-chair) [squera.github.io/fcs23/]
- PriSC 2023 [popl23.sigplan.org/home/prisc-2023]
- FMBC 2022 [fmbc.gitlab.io/2022/]
- PLAS 2020 [pages.cispa.de/plas2020/]
- FAB 2020 [scfab.github.io/2020/]

Journal Refereeing
- Transactions on Programming Languages and Systems (TOPLAS) [dl.acm.org/journal/toplas]
- Transactions on Privacy and Security (TOPS) [dl.acm.org/journal/tops]

NSF Panelist: 2024

Invited Talks

SCIF: Securing Smart Contracts with Explicit Trust
CMU Secure Blockchain Summit Apr. 2024

Compositional Security for Reentrant Applications
- University of Pennsylvania PL Club Dec. 2021
- Boston University Principles of Programming and Verification Seminar Oct. 2021
- Brown University Systems Seminar Oct. 2021
- UC Berkeley Security Seminar June 2021
- UC San Diego Security Lunch Apr. 2021

Controlling Reentrancy with Information Flow
- UC Santa Cruz Languages, Systems, and Data Lab Seminar Aug. 2019

One File for the Price of Three: Catching Cheating Servers in Decentralized Storage Networks
- MIT CSAIL Security Seminar Sept. 2018
- UC Berkeley Security Seminar Aug. 2018
- Initiative for CryptoCurrencies & Contracts (IC3) Meetup Aug. 2018

Nonmalleable Information Flow Control
- Harvard Programming Languages Seminar Apr. 2017
Outreach

Volunteer teacher for Cornell’s annual Expanding Your Horizons Conference 2016 – 2019
Volunteer teacher for Bootstrap, teaching 6th – 8th graders math and programming 2013

Teaching

Primary Instructor (University of Wisconsin–Madison)
- COMP SCI 704: Principles of Programming Languages  Fall 2024
- COMP SCI 642: Introduction to Information Security  Spring 2024
- COMP SCI 839: Language-Based Security  Fall 2023

Graduate TA (Cornell University)
- CS 5430/5431: Systems Security (and Practicum)  Spring 2018
- CS 2110: Object-Oriented Programming and Data Structures  Fall 2015

Bootstrap Volunteer Teacher
- Bootstrap Algebra (Orchard Gardens Middle School, Roxbury, MA)  Spring 2013
- Bootstrap Algebra (Newton Community Education, Newton, MA)  Fall 2013

Head TA (Brown University)
- CSCI 1510: Introduction to Cryptography and Computer Security  Fall 2011
- CSCI 0510: Models of Computation  Fall 2010

Head TA and Course Development (Brown University)
- CSCI 0190: Programming with Data Structures and Algorithms  Summer – Fall 2009