

Ethan Cecchetti

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Education

Cornell University , Ithaca, NY <i>PhD</i> , Computer Science Dissertation: <i>Mechanisms for Provable Integrity Protection in Decentralized Systems</i> Advised by Andrew C. Myers and Ari Juels	2015 – 2021
Cornell University , Ithaca, NY <i>Master of Science</i> , Computer Science	2019
Brown University , Providence, RI <i>Bachelor of Science</i> , Mathematics – Computer Science	2008 – 2012

Employment

VMware , Palo Alto, CA <i>Research Intern</i>	2019
TripAdvisor , Needham, MA <i>Software Engineer</i>	2012 – 2015
Google , Cambridge, MA <i>Software Engineering Intern</i>	2011

Awards and Honors

Best Paper Award , 42 nd IEEE Symposium on Security and Privacy	2021
National Defense Science and Engineering Graduate (NDSEG) Fellowship	2017
Best Paper Award Finalist , 24 th ACM Conference on Computer and Communication Security	2017
Outstanding Teaching Assistant , Cornell University, Department of Computer Science	Fall 2015
Senior Prize , Brown University, Department of Computer Science	2012

Conference Publications

<i>Compositional Security for Reentrant Applications</i> Ethan Cecchetti , Siqui Yao, Haobin Ni, and Andrew C. Myers 🏆 Best Paper Award [arxiv.org/abs/2103.08577]	IEEE S&P (Oakland) 2021
<i>Giving Semantics to Program-Counter Labels via Secure Effects</i> Andrew K. Hirsch and Ethan Cecchetti [doi.org/10.1145/3434316]	POPL 2021

- First-Order Logic for Flow-Limited Authorization* CSF 2020
 Andrew K. Hirsch, Pedro H. Azevedo de Amorim, **Ethan Cecchetti**, Ross Tate, and Owen Arden
 [arxiv.org/abs/2001.10630]
- PIEs: Public Incompressible Encodings for Decentralized Storage* CCS 2019
Ethan Cecchetti, Ben Fisch, Ian Miers, and Ari Juels
 [doi.org/10.1145/3319535.3354231]
- Obladi: Oblivious Serializable Transactions in the Cloud* OSDI 2018
 Natacha Crooks, Matthew Burke, **Ethan Cecchetti**, Sitar Harel, Rachit Agarwal, and Lorenzo Alvisi
 [arxiv.org/abs/1809.10559]
- Nonmalleable Information Flow Control* CCS 2017
Ethan Cecchetti, Andrew C. Myers, and Owen Arden
 🏆 **Best Paper Award Finalist**
 [doi.org/10.1145/3133956.3134054]
- Solidus: Confidential Ledger Transactions via PVORM* CCS 2017
Ethan Cecchetti, Fan Zhang, Yan Ji, Ahmed Kosba, Ari Juels, and Elaine Shi
 [doi.org/10.1145/3133956.3134010]
- Town Crier: An Authenticated Data Feed for Smart Contracts* CCS 2016
 Fan Zhang, **Ethan Cecchetti**, Kyle Croman, Ari Juels, and Elaine Shi
 [doi.org/10.1145/2976749.2978326]

Workshop Publications

- Securing Smart Contracts with Information Flow* FAB 2020
Ethan Cecchetti, Siqui Yao, Haobin Ni, and Andrew C. Myers [scfab.github.io/2020/]
 [~ethan/papers/ifc-contracts-fab20.pdf]

Invited Talks

- Compositional Security for Reentrant Applications*
 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

Professional Service

Program Committees

PLAS 2020 [pages.cispa.de/plas2020/]

FAB 2020 [scfab.github.io/2020/]

Referee for TOPLAS [dl.acm.org/journal/toplas]

Sub-reviewer for OOPSLA 2021, CCS 2020, FC 2020, PLDI 2019, and OOPSLA 2019

Department and University Service

Cornell Graduate and Professional Student Leadership Council	2019 – 2020
Cornell Graduate and Professional Student Mental Health Council	2018 – 2020
Organized Cornell's Security and Privacy Discussion Group	2016 – 2019
Computer Science Graduate Organization: President	2017 – 2019
Graduate and Professional Student Assembly: Computer Science Field Representative	2016 – 2018
Co-organizer of Computer Science Admitted PhD Student Visit Day	2016, 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

Graduate TA (*Cornell University Computer Science*)

CS 5430/5431: <i>Systems Security (and Practicum)</i>	Spring 2018
CS 2110: <i>Object-Oriented Programming and Data Structures</i>	Fall 2015

Bootstrap Volunteer Teacher

<i>Bootstrap Algebra (Orchard Gardens Middle School, Roxbury, MA)</i>	Spring 2013
<i>Bootstrap Algebra (Newton Community Education, Newton, MA)</i>	Fall 2013

Head TA (*Brown University Computer Science*)

CSCI 1510: <i>Introduction to Cryptography and Computer Security</i>	Fall 2011
CSCI 0510: <i>Models of Computation</i>	Fall 2010

Head TA and Course Development (*Brown University Computer Science*)

CSCI 0190: <i>Programming with Data Structures and Algorithms</i>	Summer – Fall 2009
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