

Ethan Cecchetti

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Education

Cornell University, Ithaca, NY
Doctoral Student, Computer Science, August 2015 – Present
Advisors: Andrew C. Myers and Ari Juels

Brown University, Providence, RI
Bachelor of Science, Mathematics – Computer Science, May 2012

Awards and Honors

National Defense Science and Engineering Graduate (NDSEG) Fellowship	2017
Cornell Computer Science Outstanding Teaching Assistant Award	Fall 2015
Brown University Department of Computer Science Senior Prize	2012

Publications

- Giving Semantics to Program-Counter Labels via Secure Effects* [~ethan/papers/niho.pdf]
Andrew K. Hirsch and **Ethan Cecchetti**
POPL 2021 – To Appear
- First-Order Logic for Flow-Limited Authorization* [arxiv.org/abs/2001.10630]
Andrew K. Hirsch, Pedro H. Azevedo de Amorim, **Ethan Cecchetti**, Ross Tate, and Owen Arden
CSF 2020
- Securing Smart Contracts with Information Flow* [~ethan/papers/ifc-contracts-fab20.pdf]
Ethan Cecchetti, Siqiu Yao, Haobin Ni, and Andrew C. Myers
FAB 2020 [scfab.github.io/2020/]
- PIEs: Public Incompressible Encodings for Decentralized Storage* [doi.org/10.1145/3319535.3354231]
Ethan Cecchetti, Ben Fisch, Ian Miers, and Ari Juels
CCS 2019
- Obladi: Oblivious Serializable Transactions in the Cloud* [arxiv.org/abs/1809.10559]
Natacha Crooks, Matthew Burke, **Ethan Cecchetti**, Sitar Harel, Lorenzo Alvisi, and Rachit Agarwal
OSDI 2018
- Nonmalleable Information Flow Control* [doi.org/10.1145/3133956.3134054]
Ethan Cecchetti, Andrew C. Myers, and Owen Arden
CCS 2017 – Best Paper Award Finalist
- Solidus: Confidential Ledger Transactions via PVORM* [doi.org/10.1145/3133956.3134010]
Ethan Cecchetti, Fan Zhang, Yan Ji, Ahmed Kosba, Ari Juels, and Elaine Shi
CCS 2017
- Town Crier: An Authenticated Data Feed for Smart Contracts* [doi.org/10.1145/2976749.2978326]
Fan Zhang, **Ethan Cecchetti**, Kyle Croman, Ari Juels, and Elaine Shi
CCS 2016

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 CCS 2020, FC 2020, PLDI 2019, and OOPSLA 2019

Department and University Service

Cornell Graduate and Professional Student Leadership Council	2019 – Present
Cornell Graduate and Professional Student Mental Health Council	2018 – Present
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 – Present
Volunteer teacher for Bootstrap, teaching 6th – 8th graders math and programming	2013

Work Experience

VMware (<i>Research Intern</i>)	Summer 2019
TripAdvisor (<i>Software Engineer – Commerce Team</i>)	July 2012 – September 2015
<ul style="list-style-type: none">• Worked on a website with hundreds of millions of unique monthly visitors in a highly collaborative environment with weekly full code releases.• Contributed to a living codebase with millions of lines of code and hundreds of authors.• Maintained, redesigned, and rewrote a complex system to import client data at scale.• Built log validation system used by multiple teams across the organization.• Helped organize the transparent migration of major business-critical infrastructure.• Mentored multiple new employees.	
Google (<i>Software Engineering Intern – Image Search</i>)	Summer 2011
<ul style="list-style-type: none">• Wrote several thousand lines of C++ backend for the mobile search team.• Integrated code with extensive existing libraries.	

Teaching and Course Development

Graduate TA (<i>Cornell Computer Science</i>)	
<i>Systems Security with Practicum (CS 5430/5431)</i>	Spring 2018
<ul style="list-style-type: none">• Mentored design and implementation of security-oriented systems by student groups.	

Graduate TA (*Cornell Computer Science*)

Object-Oriented Programming and Data Structures (CS 2110)

Fall 2015

- Revised and updated assignments and weekly recitations.
- Mentored multiple new undergraduate TAs.

Bootstrap Volunteer Teacher

Orchard Gardens Middle School, Roxbury, MA

Spring 2013

Newton Community Education, Newton, MA

Fall 2013

- Helped teach 10-15 middle school children basic algebra through programming a video game.
- Followed 10-week curriculum outline (www.bootstrapworld.org/materials/algebra/)
 - Made necessary modifications based on the speed and background of each class.

Head TA (*Brown Computer Science*)

Introduction to Cryptography and Computer Security (CSCI 1510)

Fall 2011

Models of Computation (CSCI 0510)

Fall 2010

- Managed staffs of 4 and 5 other undergraduate TAs.
- Rewrote assignments to fit a new syllabus (CSCI 0510).
- Updated and improved assignments (CSCI 1510).
- Held weekly office hours and labs, and graded assignments.

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

Programming with Data Structures and Algorithms (CSCI 0190)

Summer – Fall 2009

- Managed staff of 4 other undergraduate TAs.
- Helped construct the syllabus for a completely new course.
- Created and tested 9 new homeworks and 3 new labs with the professor and 4 other students.