# Han Zhang

*Curriculum Vitae*

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## Research Interests

Computer Networks, Security and Privacy, Mobile Systems, Internet of Things.

## Education

2017 – May 2023 (exp.) **Ph.D. Student in Computer Science**, Carnegie Mellon University, Pittsburgh, PA. Advisors: Yuvraj Agarwal, Matt Fredrikson.

2014 – 2017 **B.S. in Computer Science**, University of Michigan, Ann Arbor, MI.

## Publications

MobiSys 2022 TEO: Ephemeral Ownership for IoT Devices to Provide Granular Data Control.
**Han Zhang**, Yuvraj Agarwal, Matt Fredrikson. The 20th ACM International Conference on Mobile Systems, Applications, and Services, June 2022.
`https://github.com/synergylabs/TEO-release`

MobiSys 2022 Demo Demo: Protecting User Data through Ephemeral Ownership of IoT Devices.
**Han Zhang**, Yuvraj Agarwal, Matt Fredrikson. The 20th ACM International Conference on Mobile Systems, Applications, and Services, June 2022.

USENIX 2021 Capture: Centralized Library Management for Heterogeneous IoT Devices.
**Han Zhang**, Abhijith Anilkumar, Matt Fredrikson, Yuvraj Agarwal. The 30th USENIX Security Symposium, August 2021.
`https://github.com/synergylabs/iot-capture`

VMCAI 2021 Netter: Probablistic, Stateful Network Models.
**Han Zhang**, Chi Zhang, Arthur Azevedo de Amorim, Yuvraj Agarwal, Matt Fredrickson, and Limin Jia. The 22nd International Conference on Verification, Model Checking, and Abstract Interpretation, January 2021.
`https://github.com/arthuraa/netter`

HotNets 2016 Towards Comprehensive Repositories of Opinions.
**Han Zhang**, Kasra Edalat Nejad, Amir Rahmati, and Harsha V. Madhyastha. The 15th ACM Workshop on Hot Topics in Networks, Atlanta, GA, November 2016.

## Preprints

arXiv 2205.11850 Faithful Explanations for Deep Graph Models.
Zifan Wang, Yuhang Yao, Chaoran Zhang, **Han Zhang**, Youjie Kang, Carlee Joe-Wong, Matt Fredrikson, Anupam Datta.

arXiv 2205.04405 Self-Serviced IoT: Practical and Private IoT Computation Offloading with Full User Control.
Dohyun Kim, Prasoon Patidar, **Han Zhang**, Abhijith Anilkumar, and Yuvraj Agarwal.

## Honors and Awards

2021 Qualcomm Innovation Fellowship - Finalist
Peekaboo: Architectural Support for Building Privacy-Sensitive Smart Home Apps (with Haojian Jin).

2019 Qualcomm Innovation Fellowship - Finalist
Do-it-Yourself-Locally: An IoT architecture For Localized Data Control for Privacy and Security (with Dohyun Kim).

2015 Summer Undergraduate Research in Engineering Program, University of Michigan.

2014-2015 Undergraduate Research Opportunity Program, University of Michigan.

## Talks and Presentations

2022 TEO: Ephemeral Ownership for IoT Devices to Provide Granular Data Control, *MobiSys '22*.

2021 Capture: Centralized Library Management for Heterogeneous IoT Devices, *USENIX '21*.

2021 Netter: Probablistic, Stateful Network Models, *VMCAI '21*.

## Teaching

Fall 2021 Teaching assistant, 15-440/640: Distributed Systems, Carnegie Mellon University.

Fall 2019 Teaching assistant, 15-440/640: Distributed Systems, Carnegie Mellon University.

Fall 2016 Teaching assistant, EECS 388: Intro to Computer Security, University of Michigan.

## Programming Languages

C++, Python, Java, Go.