

# Hannah Gommerstadt

## Education

- 2019 **Ph.D.**, *Computer Science*, Carnegie Mellon University, Pittsburgh, PA.  
Thesis: Session-Typed Concurrent Contracts  
Committee: Frank Pfenning, Limin Jia, Jan Hoffman, Bernardo Toninho, Adrian Francalanza  
Honors: Alan J Perlis Graduate Student Teaching Award, 2018. Carnegie Mellon University Presidential Fellowship, 2017 - 2018.
- 2016 **M.S.**, *Computer Science*, Carnegie Mellon University, Pittsburgh, PA.  
Honors: Microsoft Research Graduate Women's Scholarship, 2015 - 2016. Achievement Rewards for College Scientists (ARCS) Scholarship, 2014 - 2017.
- 2013 **B.A.**, *Computer Science & Mathematics*, Harvard University, Cambridge, MA.  
Thesis: Securing Public-key Cryptography on the Android Platform.  
Advisors: Stephen Chong & Aslan Askarov.  
Minor: Near Eastern Languages and Civilizations.

## Positions

- 2019 - **Assistant Professor of Computer Science**, *Vassar College*, Poughkeepsie, NY.
- 2013 - 2014 **Software Development Engineer**, *Microsoft Inc.*, Redmond, WA.

## Publications

### Journal Articles

- 2022 Hannah Gommerstadt, Limin Jia, Frank Pfenning. Session-Typed Concurrent Contracts. *Journal of Logical and Algebraic Methods in Programming (JLAMP)*, 124 (2022) 100731.

### Conference Proceedings

- 2018 Hannah Gommerstadt, Limin Jia, Frank Pfenning. Session-Typed Concurrent Contracts. *European Symposium on Programming Languages (ESOP)*, April 2018.
- 2016 Limin Jia, Hannah Gommerstadt, Frank Pfenning. Monitors and Blame Assignment for Higher-Order Session Types. *Principles of Programming Languages (POPL)*, January 2016.

## Invited Talks

- 2023 Concurrent Tree Contracts. McGill University Programming Languages Seminar, May.
- 2023 Concurrent Tree Contracts. University of Bologna Programming Languages Seminar, Mar.
- 2019 I'm a Student Again: Heading to Graduate School after a Break. Grace Hopper Celebration. Oct.
- 2018 Session-Typed Concurrent Contracts. Harvard University Programming Languages Seminar, Apr.
- 2016 Monitors and Blame Assignment for Higher-Order Session Types. University of Maryland College Park Programming Languages Seminar, Nov.

## Teaching

### Vassar College

- Instructor **Compilers (CMPU 331)**, *Fall 2023, Fall 2022, Spring 2022, Fall 2021, Fall 2020, Spring 2020*.  
Undergraduate course on the design and implementation of compilers.

Instructor **Computer Science II: Data Structures and Algorithms (CMPU 102)**, *Spring 2022, Fall 2021, Spring 2021, Fall 2020, Spring 2020, Fall 2019*.  
Undergraduate course on object-oriented programming and data structures.

Instructor **Foundations of Computer Science (CMPU145)**, *Fall 2023, Fall 2022*.  
Undergraduate course on discrete mathematics and functional programming

Instructor **Computer Security (CMPU 315)**, *Spring 2021*.  
Undergraduate seminar on computer security.

### Carnegie Mellon University

Instructor **Principles of Imperative Computation (15-122)**, *Summer 2018, Summer 2017*.  
Undergraduate course on code correctness, imperative programming and data structures.

### Short Courses

Instructor **Programming and Monitoring with Session Types**, *University of Bologna, March 2023*.  
Graduate seminar.

## Service

### Vassar College.

- Academic Panel, 2023 - 2025, 2020 - 2022.

### Conference Organization.

- Programming Languages Mentoring Workshop (PLMW) Co-Chair, 2022 - 2024.
- New Jersey Programming Languages Seminar (NJPLS) Co-Chair, 2022.
- Programming Languages Mentoring Workshop (PLMW) Panelist, 2021 & 2020.
- Grace Hopper Celebration (GHC) Research Scholar Mentor, 2019.

### Program Committees.

- Workshop on Principles of Secure Compilation (PriSc), 2024.
- International Conference on Functional Programming (ICFP), 2023.
- Systems, Programming, Languages, and Applications: Software for Humanity Education (SPLASH-E), 2023.
- Workshop on Verification and Monitoring at Runtime Execution (VORTEX), 2023 & 2022.
- European Conference on Object-Oriented Programming (ECOOP) Doctoral Symposium, 2022.
- International Workshop on Programming Language Approaches to Concurrency and Communication-centric Software (PLACES), 2020.
- Object-Oriented Programming, Systems, Languages & Applications (OOPSLA) Artifact Evaluation, 2019.

### Reviews.

- PeerJ Computer Science, 2023.
- Journal of Object Technology (JOT), 2023.
- National Science Foundation (NSF) Panel, 2021 & 2020.
- Principles of Programming Languages (POPL) External Reviewer, 2021.
- Journal of Logical and Algebraic Methods in Programming (JLAMP), 2021.
- Journal of Computer Security (JCS), 2019.

### Carnegie Mellon University, Computer Science Department.

- PhD Women group co-founder, 2014 - 2019.
- Representative to the Graduate Student Assembly, 2017 - 2018.
- Admissions Committee, 2018.

### Harvard University.

- Executive Committee Member, Harvard Club of the Hudson Valley, 2023 - present.
- Executive Committee Member, Harvard Club of Western Pennsylvania, 2017 - 2019.
- Alumni Interviewer, 2013 - 2019, Seattle, WA & Pittsburgh, PA.

## Skills

Languages Native/Bilingual Proficiency in English & Russian. Proficiency in Hebrew & Spanish.

Programming C, Java, HTML/CSS,  $\text{\LaTeX}$ , OCaml, Python