

**Jeffrey M. Helt**  
Computer Science Department  
Princeton University  
35 Olden Street, Princeton, NJ 08540

<b>Education</b>	PRINCETON UNIVERSITY	Princeton, NJ
	Ph.D. in Computer Science. Expected 2023. M.A. in Computer Science, 2020. Adviser: Wyatt Lloyd	
	CARNEGIE MELLON UNIVERSITY	Pittsburgh, PA
	M.S. in Computer Science, 2018. Advisers: Vyas Sekar & Srini Seshan	
	AMHERST COLLEGE	Amherst, MA
	B.A. in Computer Science & Economics, 2013.	

**Research Interests**

Distributed systems, databases, computer networks.

**In Preparation**

**Jeffrey Helt**, Abhinav Sharma, Trevor Cai, Daniel J. Abadi, Wyatt Lloyd, Jose M. Faleiro. CopyCat: Cloned Concurrency Control That Always Keeps Up. Under submission to VLDB 2020.

**Refereed Publications**

- [1] **Jeffrey Helt**, Guoyao Feng, Vyas Sekar, Srini Seshan. Sandpaper: Mitigating Performance Interference in CDN Edge Proxies. In *Proc. 4th ACM/IEEE Symposium on Edge Computing*. November 2019.
- [2] Soo-Jin Moon, **Jeffrey Helt**, Yifei Yuan, Yves Bieri, Sujata Banerjee, Vyas Sekar, Wenfei Wu, Mihalis Yannakakis, Ying Zhang. Alembic: Automated Model Inference for Stateful Network Functions. In *Proc. 16th USENIX NSDI*. February 2019.

**Teaching Experience**

Fall 2019	<b>Teaching Assistant</b>	COS-418: Distributed Systems, Princeton University Advanced undergraduate and master's course on the fundamentals of distributed systems. About 100 students. Taught weekly recitation, held office hours, and graded exams.
Spring 2017	<b>Teaching Assistant</b>	15-386: Neural Computation, Carnegie Mellon University Advanced undergraduate and master's course on the computational mechanisms underlying intelligent behavior. About 40 students. Graded and held weekly office hours.
2015 – 2016	<b>Volunteer Teacher</b>	Advanced Computer Science, Code Nation High-school course on advanced web development. About 25 students. Worked with 2 other volunteers to teach classes twice weekly.
2014 – 2015	<b>Volunteer Teacher</b>	Computer Science Foundations, Code Nation High-school course on the fundamentals of computer science and web application development. About 30 students. Worked with 2 other volunteers to teach classes twice weekly.

Fall 2012	<b>Teaching Assistant</b>	COSC-161: Computer Systems I, Amherst College Introductory undergraduate course on the fundamentals of hardware and software systems. About 30 students. Assisted students during weekly lab sessions.
Fall 2012, Spring 2011, Fall 2010	<b>Teaching Assistant</b>	COSC-111: Computer Science I, Amherst College Introductory undergraduate course on the fundamentals of computer science and Java programming. About 120 students. Assisted students during weekly lab sessions.

## Professional Experience

2014 – 2016	<b>Software Engineer</b> , Squarespace.
2013 – 2014	<b>FICC Technology Analyst</b> , Goldman Sachs.

## Service

2018	<b>Member</b> , Carnegie Mellon University M.S. in CS Admissions Committee.
2017	<b>Member</b> , Carnegie Mellon University M.S. in CS Admissions Committee.

## Honors & Awards

2018	Dr. Ilian L. Mihov '96 Graduate Fellowship.
2017	Siebel Scholar, Class of 2018.
2017	Amherst Memorial Fellowship.
2016	John Woodruff Simpson Fellowship.
2010 – 2013	NESCAC All-Academic.

## Graduate Coursework

### Princeton University

Spring 2020	Advances in Automated Reasoning (Instructor: Aarti Gupta).
Spring 2019	Advanced Computer Systems (Instructor: Michael Freedman).
Spring 2019	Theoretical Machine Learning (Instructor: Rob Schapire).
Fall 2018	Automated Reasoning about Software (Instructor: Zak Kincaid).
Fall 2018	Advanced Computer Networks (Instructor: Jen Rexford).

### Carnegie Mellon University

Spring 2018	Graduate Computer Networks (Instructor: Srinivasan Seshan).
Spring 2018	Computability and Learnability (Instructor: Jeremy Avigad).
Fall 2017	Advanced Operating Systems & Distributed Systems (Instructor: David Andersen).
Spring 2017	Introduction to Machine Learning (Instructors: Aarti Singh & Pradeep Ravikumar).
Spring 2017	Graduate Computer Vision (Instructor: Deva Ramanan).
Fall 2016	Probability & Mathematical Statistics (Instructor: Sivaraman Balakrishnan).