

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

**Education**

<b>Princeton University</b> PhD in Computer Science. Expected May 2023. Adviser: Wyatt Lloyd	Princeton, NJ
<b>Carnegie Mellon University</b> MS in Computer Science. May 2018. Advisers: Vyas Sekar & Srinu Seshan GPA: 4.08/4.33	Pittsburgh, PA
<b>Amherst College</b> BA in Computer Science & Economics. May 2013. GPA: 3.67/4.0	Amherst, MA

## Research Interests

Databases, distributed systems, computer networks, operating systems.

## In Preparation

- [1] **Jeffrey Helt**, Guoyao Feng, Vyas Sekar, Srinu Seshan. Sandpaper: Mitigating performance interference in CDN edge proxies.

## Refereed Publications

- [1] 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. To appear in *Proc. 16th USENIX NSDI*. February 2019.
- [2] Heqing Ya, Haonan Sun, **Jeffrey Helt**, Tai Sing Lee. Learning to Associate Words and Images Using a Large-scale Graph. In *Proc. 14th CRV*. May 2017.

## Teaching Experience

Spring 2017	<b>Teaching Assistant</b>	15-386: Neural Computation, Carnegie Mellon 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, Spring 2011, Fall 2010      **Teaching Assistant**      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

2018 – Present      **Research Assistant**, Princeton University.  
2017 – 2018      **Research Assistant**, Carnegie Mellon University.  
2014 – 2016      **Software Engineer**, Squarespace.  
2013 – 2014      **FICC Technology Analyst**, Goldman Sachs.

## Service

2019      **Member**, Princeton CS Graduate Professional Development Committee.  
2018      **Member**, Carnegie Mellon MSCS Admissions Committee.  
2017      **Member**, Carnegie Mellon MSCS 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 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      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      Computer Vision (Instructor: Deva Ramanan).  
Fall 2016      Probability & Mathematical Statistics (Instructor: Sivaraman Balakrishnan).