

Peter Kraft

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EDUCATION

Stanford University, Stanford CA

Ph.D. Candidate in Computer Science beginning September 2017.

Harvard University, Cambridge MA

Received Bachelor's Degree *magna cum laude* with Highest Honors in Computer Science May 2017. Finalist for Computing Research Association (CRA) Outstanding Undergraduate Researcher Award. Received Hoopes Prize for excellence in undergraduate research for senior thesis.

Munster High School, Munster IN

Graduated with Highest Honors, June 2013. Placed 5th nationwide in Intel Science Talent Search 2013.

EXPERIENCE

Graduate Student

September 2017—Present

Computer Science Department, Stanford University

Stanford, CA

- Advised by Matei Zaharia and Peter Bailis.
- Worked on MacroBase and Arachne projects, work published in OSDI 2018.

Software Engineering Intern

June 2018—September 2018

Google

Mountain View, CA

- Worked with Atul Adya on the Slicer team to develop Google's sharder for stateful services.
- Project dramatically improved Slicer's load-balancing performance for key users.

Research Assistant

June 2016—May 2017

Systems Group, Harvard University

Cambridge, MA

- Developing ASC (Automatically Scalable Computation) project under Professor Margo Seltzer.
- Project aims to speed up unmodified binaries through automatic parallelization.
- Developed system for dynamically analyzing data dependencies of computations.
- Project became senior thesis, received Hoopes Prize for excellence in undergraduate research.

Teaching Fellow

January 2017—May 2017

CS161, Harvard University

Cambridge, MA

- Teaching fellow for the course CS161: Operating Systems.
- Duties include teaching hourlong weekly sections, holding office hours, and grading problem sets and exams.

Research Assistant

May 2016—November 2016

HarvardNLP Group, Harvard University

Cambridge, MA

- Worked under Professor Alexander Rush to develop system for predicting congressional roll-call votes.
- Created novel representation of problem that substantially outperformed prior models.
- Work published at Empirical Methods in Natural Language Processing (EMNLP) 2016.

PUBLICATIONS

Peter Kraft, Hirsh Jain, Alexander Rush, "An Embedding Model For Predicting Roll-Call Votes." Empirical Methods for Natural Language Processing (EMNLP) 2016.

Peter Kraft, "Automatically Scalable Computation That Is More Scalable and Automatic." Senior Thesis, Harvard University.

Henry Qin, Qian Li, Jacqueline Speiser, Peter Kraft, John Ousterhout, "Arachne: Core-Aware Thread Management." Symposium on Operating Systems Design and Implementation (OSDI) 2018.