# Robbie Weber

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### Education

## University of Washington

 $Ph.D.\ Student$  in Computer Science and Engineering MS Awarded December 2017

### University of Illinois

BSLAS in Math and Computer Science

• GPA: 3.95

• Minor in German

Seattle, WA
September 2015 - Present
Urbana-Champaign, IL
August 2011 - May 2015

#### Research Interests

My interests lie broadly in designing algorithms on graph problems. Problems I've worked on include routing, planarity, and matchings. I'm also interested more generally in combinatorial questions that can be answered with algorithm design.

# **Publications and Preprints**

- A Simply Exponential Upper Bound on the Maximum Number of Stable Matchings With Anna Karlin and Shayan Oveis Gharan
   In Proceedings of 50<sup>th</sup> Annual ACM SIGACT Symposium on Theory of Computing (STOC 2018)
- Embedded-Width: A Variant of Treewidth for Plane Graphs With Glencora Borradaile, Hung Le, and Jeff Erickson Pre-print. https://arxiv.org/abs/1703.07532

# Teaching Experience

- Instructor for CSE 332 Summer 2018
  - Data Structures and Parallelism is the second course after students enter the CSE major
  - Course had 30 Students and 2 TAs
  - Wrote new exercises connecting dictionaries to sorting algorithm lower bounds.
- Graduate Teaching Assistantships
  - CSE 373 (Non-major) Data Structures & Algorithms Spring 2018, Autumn 2018, Winter 2019
  - CSE 421 (Undergraduate) Introduction to Algorithms Winter 2018
  - CSE 521 (Graduate) Design and Analysis of Algorithms Winter 2017
  - CSE 417 (Non-major) Algorithms and Computational Complexity Winter 2016
  - CSE 311 Foundations of Computing I Autumn 2015
- Undergraduate Assistantships
  - CS 374 Algorithms and Models of Computation Spring 2015
  - CS 173 Discrete Structures 4 Semesters Spring 2013 Fall 2015
  - CS 125 Introduction to Computer Science 2 Semesters Spring 2012 Fall 2012

### Service

- External reviewer for: ITCS 2017, ESA 2017, SODA 2018, FOCS 2018, SODA 2019, Journal of Combinatorial Optimization
- Scheduler for Graduate Student Visit Days (2017,2018)

- Member of Ph.D. Admissions Committee (2018)
- Volunteer Tutor for CSE department courses (Winter 2016-Spring 2017)
- Organizer for theory student reading group (Winter, Spring 2017)

## Honors and Awards

- C.W. Gear Outstanding Undergraduate Student (2015 Computer Science Department, UIUC)
- Akuna Capital LLC Award for Outstanding Poster Presentation at 2014 UIUC Undergraduate Research Symposium (With Chad Franzen and Rishabh Marya)
- Most Outstanding Undergraduate Major Award in Mathematics and Computer Science (2014 Mathematics Department, UIUC)
- John R. Pasta Outstanding Undergraduate Award (2014 Computer Science Department, UIUC)
- Sam and Dubey Portnoy Memorial Scholarship (2014-15 College of Liberal Arts and Sciences, UIUC)
- CHP Outstanding Senior Award (2014 Campus Honors Program, UIUC)
- Robert A. and Elanor A. Flinn Award for Undergraduate Research (2014 German Department, UIUC)
- Outstanding Student for German (2013 German Department, UIUC)