

Jessica Su  
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## Education

- **Stanford University** Palo Alto, CA  
*PhD student, Computer Science (4.0 GPA)* September 2013 - present
- **Stanford University** Palo Alto, CA  
*M.S., Computer Science (4.0 GPA)* September 2013 - September 2016
- **California Institute of Technology** Pasadena, CA  
*B.S., Computer Science (3.8 GPA)* September 2007 - June 2013

## Research experience (selected)

- **Stanford University** *PhD Student, September 2013 - present*
  - Developed infrastructure to deanonymize web browsing history using publicly available Twitter data. Successfully deanonymized 72% of experiment participants. Published the results in a conference paper (“De-anonymizing Web Browsing Data with Social Networks”, WWW 2017).
- **Twitter** *Research Intern, Summer 2015, Fall 2015, Winter 2016*
  - Quantified the effect of Who To Follow recommendations on the global structure of the Twitter network. Published the results in a conference paper (“The Effect of Recommendations on Network Structure”, WWW 2016).
  - Deployed an experiment to measure the long-term effects of varying the diversity in recommendations that are shown to new users. Found a treatment that increased their average time on Twitter by 1%.
- **Microsoft Research** *Research Intern, Summer 2014*
  - Developed an algorithm to predict traits of Internet Explorer users from their browsing activity.
- **Caltech Department of Mathematics** *Summer Undergraduate Research Fellow, Summer 2011*
  - Proved that Tutte polynomials do not satisfy the Kontsevich conjecture.

## Teaching experience

- **CS 161: Design and Analysis of Algorithms** *Instructor, Summer 2016*
  - Taught undergraduate algorithms to a class of 111 students.
  - Overall quality of instruction: 4.0 out of 5.0. (Average for previous five instructors: 3.7 out of 5.0.)
  - You may view my lecture notes at <http://web.stanford.edu/class/archive/cs/cs161/cs161.1168/>
- **CS 161: Design and Analysis of Algorithms** *Teaching Assistant, Fall 2014, Spring 2015, 2016, 2017*
- **MS&E 111: Introduction to Optimization** *Teaching Assistant, Winter 2015*
- **CS 224W: Social and Information Network Analysis** *Teaching Assistant, Fall 2016*
- **CS 246: Mining Massive Data Sets** *Teaching Assistant, Winter 2017*

## Awards

- Outstanding TA bonus (Winter 2017, Spring 2017, \$1000 per quarter)
- Stanford School of Engineering Fellowship (2013, one year of funding)
- Top 500 Putnam (2008)
- Lingle Scholarship (2007, awarded to top two freshmen in incoming class)
- Axline Scholarship (2007, full ride merit scholarship)

## Publications

- **Su J**, Shukla A, Goel S, and Narayanan A. De-anonymizing Web Browsing Data with Social Networks. WWW 2017.
- **Su J**, Sharma A, and Goel S. The Effect of Recommendations on Network Structure. WWW 2016.
- Marcolli M and **Su J** (2013) Arithmetic of Potts Model Hypersurfaces. International Journal of Geometric Methods in Modern Physics 10-4. arXiv:1112.5667 [math-ph].
- Liebovitch L, Peluso P, Norman M, **Su J**, Gottman J (2011) Mathematical model of the dynamics of psychotherapy. Cognitive Neurodynamics 1-11.
- Peluso P, Liebovitch L, Gottman J, **Su J** (2011) A mathematical model of psychotherapy: an investigation using dynamic non-linear equations to model the therapeutic relationship. Psychotherapy Research.
- Ward C, **Su J**, Huang Y, Lloyd A, Gould F, Hay B (2011) Medea selfish genetic elements as tools for altering traits of wild populations: a theoretical analysis. Evolution 65:1149-1162.
- Hay B, Chen CH, Ward CM, Huang H, **Su JT**, Guo M (2010) Engineering the genomes of wild insect populations: Challenges, and opportunities provided by synthetic Medea selfish genetic elements. Journal of Insect Physiology 56(10):1402-1413.
- Chen CH, Huang H, Ward CM, **Su JT**, Schaeffer LV, Guo M, Hay BA (2007) A synthetic maternal-effect selfish genetic element drives population replacement in Drosophila. Science 316:597-600.