Jessica Su

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Education

• Stanford University

September 2013 - April 2018

- Ph.D., Computer Science (4.0 GPA)
- Thesis title: Recommendation Systems on Social Networks
- California Institute of Technology

- B.S., Computer Science (3.8 GPA)

September 2007 - June 2013

Work 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. You may read more about the project in The Atlantic (http://theatln.tc/2kSBZgt) and The Conversation (http://bit.ly/2DK9gVQ).

Facebook

Software Engineering Intern, Summer 2017

- Trained machine learning models to help Facebook understand people better, so they can show better ads.

• 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.
- Microsoft Research

Research Intern, Summer 2014

Developed an algorithm to predict traits of Internet Explorer users from their browsing activity.

Teaching experience

• CS 161: Design and Analysis of Algorithms

Instructor, Summer 2016

- Taught undergraduate algorithms to a class of 111 students. Course webpage at http://stanford.io/2xN89kO
- Overall quality of instruction: 4.0 out of 5.0. (Average for previous five instructors: 3.7 out of 5.0.)
- CS 161: Design and Analysis of Algorithms

Teaching Assistant (5x), Fall 2014 - Fall 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, Winter 2018

Awards

- Outstanding TA bonus: A \$1000 award given to the top 5% of TAs in the department. I won this award four quarters in a row, and was nominated for the award by three different professors (Jure Leskovec, Jeff Ullman, and Mary Wootters).
- Stanford School of Engineering Fellowship (2013, one year of funding)
- 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.

Other activities

- Reviewer, WWW 2018, Poster Track
- Reviewer, WWW 2017, Poster Track