Allison June Barlow Chaney

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Research Interests Recommendation systems, text analysis, visualization, human-centered applications, scalable inference.

Education

Princeton University
Ph.D. Candidate, Computer Science — January 2014 – Present
Advisor: David M. Blei
M.A., Computer Science — January 2014
Coursework: Advanced Methods in Probabilistic Modeling, Artificial Intelligence, Interacting with Data, Applied Probabilistic Modeling

Swarthmore College
B.A., Computer Science and B.S., Engineering — 2004 – 2008
Coursework: Adaptive Robotics, Artificial Intelligence, Mobile Robotics

Experience

Assistant Instructor, Princeton University
Interacting with Data (COS424): Developed & graded assignments, held office hours. — Spring 2014
Intro to Computer Science (COS126): Taught 4 hours of precept per week. — Spring 2013

Research Intern, Microsoft Research — Summer 2013
Explored Nielsen TV panel data for group recommendation.

Research Intern, eBay/Hunch — Summer 2012
Explored personalized recommendation based on recent user context.

Research Assistant, Princeton University
Developed a tool for browsing the output of topic models. — Sept. 2010 – July 2011
Graduate student research; see publications below. — July 2011 – Present

Software Engineer, Yorba Foundation — July 2009 – July 2010
Worked on Shotwell, an open-source photo organizer and editor.

Technical Director Resident, Pixar Animation Studios — July 2008 – July 2009
Prepared material from past productions for Disney themepark attractions.

Publications

A. Chaney, H. Wallach, and D. Blei. **Who, What, When, Where, and Why? A Computational Approach to Understanding Historical Events Using State Department Cables**. Text as Data, 2015.

A. Chaney, D. Blei, and T. Eliassi-Rad. **A Probabilistic Model for Using Social Networks in Personalized Item Recommendation**. RecSys, 2015.

A. Chaney, K. Dinakar, H. Lieberman, and D. Blei. **Real-time Topic Models for Crisis Counseling**. KDD Workshop: Data Science for Social Good, 2014.

A. Chaney, M. Gartrell, J. Hofman, J. Guiver, N. Koenigstein, P. Kohli, and U. Paquet. **A Large-scale Exploration of Group Viewing Patterns**. TVX, 2014. Honorable Mention Award (best paper runner-up).

A. Chaney, P. Gopalan, and D. Blei. **Poisson Trust Factorization for Incorporating Social Networks**

into Personalized Item Recommendation. NIPS Workshop: What Difference Does Personalization Make?, 2013.

A. Chaney, M. Gartrell, J. Hofman, J. Guiver, N. Koenigstein, P. Kohli, and U. Paquet. **Mining Large-scale TV Group Viewing Patterns for Group Recommendation**. Tech Report, 2013.

A. Chaney and D. Blei. **Visualizing topic models**. International AAAI Conference on Social Media and Weblogs, 2012.

Professional Activities

Women in Machine Learning 2014 Workshop Organizer. (in conjunction with NIPS)
Program Chair, in charge of invited and student speakers, and also mentorship program.

Invited Talks

Brigham Young University. Computer Science Colloquium, 2015.

Technical Skills

Operating Systems: Linux, Mac OS, Windows

Programming Languages: Python, R, C/C++, Bash, SQL, CSS/HTML, Java, Javascript

Misc: LaTeX, SVN, Git, Inkscape, GIMP

Additional Skills

Languages: English Fluency, Conversational Spanish

Hobbies: Painting, drawing, gardening, knitting & crocheting, cooking, piano & guitar, reading

Recent Volunteering

Employment Specialist, Princeton LDS Spanish-Speaking Congregation May 2014 – Present
Teach employment workshops, provide individual career and education counseling. Developed and taught a free nine-session SAT prep class in Summer 2015.

Summer Programming Experiences Mentor, Princeton Computer Science Summer 2015
SPE is intended for freshmen who have taken one intro CS class, but could benefit from additional programming experience in a supportive environment. Mentored a group of four (three were women).

Youth Leader, Princeton LDS English-Speaking Congregation January 2013 – March 2015
Mentored, taught, and tutored teenage girls. Ranged from helping with homework to planning large social events.