

Education

- Ph.D. Computer Science**, University of Illinois at Urbana-Champaign Aug 2012 – Aug 2018
(Expected)
Natural Language Processing and Machine Learning
Thesis: Textual Entailment from Image Caption Denotations
Advisor: Julia Hockenmaier
Committee: Katrin Erk, Dan Roth, ChengXiang Zhai
- B.S. Computer Science, B.A. Japanese**, University of Pittsburgh 2008 – 2012

Work Experience

- Research Assistant**, University of Illinois 2012 – Present
- Developed models to explore the effectiveness of different semantic representations, achieving competitive performance on downstream tasks like textual entailment and sentence similarity
 - Implemented and maintained a relational database to store a structured graph of image caption information
- Research Intern**, Grammarly Sept 2017 – Dec 2017
- Collected the first dataset for real-world text coherence across multiple genres
 - Designed and tested annotation guidelines, and managed annotators throughout the data collection process
 - Reimplemented previous coherence models and analyzed their performance on new real-world coherence task
 - Developed new paragraph-aware neural network model of text coherence
- Teaching Assistant, Machine Learning**, University of Illinois Aug 2016 – Dec 2016
- Assisted individual students in understanding the course material in weekly office hours
 - Helped develop content for weekly discussion sections of 10-20 students
 - Wrote homework assignments, weekly quizzes, exam questions, and grading rubrics
- Product Search Software Development Intern**, A9 May 2016 – Aug 2016
- Developed annotation guidelines and labeled data to map queries to a knowledge base
 - Developed text features and wrote production code to extract these features from queries
 - Analyzed accuracy and efficiency of features and implemented pruning strategies to improve performance

Publications

- Alice Lai and Joel Tetreault. **Discourse Coherence in the Wild: A Dataset, Evaluation, and Methods.** *Special Interest Group on Discourse and Dialogue (SIGDIAL)*, 2018.
- Alice Lai, Yonatan Bisk, and Julia Hockenmaier. **Natural Language Inference from Multiple Premises.** *International Joint Conference on Natural Language Processing*, 2017.
- Alice Lai and Julia Hockenmaier. **Learning to Predict Denotational Probabilities For Modeling Entailment.** *European Chapter of the Association for Computational Linguistics*, 2017.
- Alice Lai and Julia Hockenmaier. **Illinois-LH: A Denotational and Distributional Approach to Semantics.** *International Workshop on Semantic Evaluation (SemEval)*, 2014.
- Peter Young, Alice Lai, Micah Hodosh, and Julia Hockenmaier. **From image description to visual denotations: New similarity metrics for semantic inference over event descriptions.** *Transactions of the Association for Computational Linguistics Vol. 2*, 2014.

Awards

- National Science Foundation Graduate Research Fellowship 2012 – 2015
- Yahoo! Grace Hopper Celebration Scholarship 2013

Skills

Primary programming languages: Python, Java

Implemented models using deep learning libraries: PyTorch, Tensorflow

Familiar with NLP toolkits, including Stanford CoreNLP, OpenNLP, NLTK

Service/Organizations

Artificial Intelligence Seminar Organizer, University of Illinois

2015 – Present

- Coordinated with professors and students to schedule visiting speakers to the department

Secretary & Website Manager, UIUC Graduate Society of Women Engineers

2015 – 2017

- Coordinated with committee members to send weekly newsletter, maintained website of upcoming events