Research Interests

Natural Language Processing with focus on discourse understanding, in particular, text specificity and its impact on discourse and coherence among different groups of audiences.

Education

**University of Pennsylvania**, Philadelphia, PA

*Ph.D. Candidate*, Computer and Information Science Fall 2012 - 2017 (Expected)

Advisor: Ani Nenkova

Current GPA: 3.92

*M.S.E.*, Computer and Information Science Spring 2013

**University of Michigan**, Ann Arbor, MI

*B.S.E. Magna Cum Laude*, Computer Science and Engineering Spring 2011

**Shanghai Jiao Tong University**, Shanghai, China

*B.E.*, Electrical and Computer Engineering Summer 2011

Referred Publications

Junyi Jessy Li, Kapil Thadani and Amanda Stent. “The Role of Discourse Units in Near-Extractive Summarization”. Annual SIGdial Meeting on Discourse and Dialogue (SIGDIAL), 2016. (This paper was nominated for the best paper award).

Junyi Jessy Li and Ani Nenkova. “The Instantiation Discourse Relation: A Corpus Analysis of Its Properties and Improved Detection”. North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL), 2016.

Junyi Jessy Li, Bridget O’Daniel, Yi Wu, Wenli Zhao and Ani Nenkova. “Improving the Annotation of Sentence Specificity”. Language Resources and Evaluation Conference (LREC), 2016.

Junyi Jessy Li. “Estimating Text Intelligibility via Information Packaging Analysis”. AAAI Conference on Artificial Intelligence AAAI/SIGAI Doctoral Consortium, 2016.

Junyi Jessy Li and Ani Nenkova. “Detecting Content-Heavy Sentences: A Cross-Language Case Study”. Conference on Empirical Methods in Natural Language Processing (EMNLP), 2015.

Junyi Jessy Li and Ani Nenkova. “Fast and Accurate Prediction of Sentence Specificity”. AAAI Conference on Artificial Intelligence (AAAI), 2015.

Junyi Jessy Li, Marine Carpuat and Ani Nenkova. “Cross-lingual Discourse Relation Analysis: A corpus study and a semi-supervised classification system”. International Conference on Computational Linguistics (COLING), 2014.

Junyi Jessy Li, Marine Carpuat and Ani Nenkova. “Assessing the Discourse Factors that Influence the Quality of Machine Translation”. Annual Meeting of the Association for Computational Linguistics (ACL), 2014.

Junyi Jessy Li and Ani Nenkova. “Addressing Class Imbalance for Improved Recognition of Implicit Discourse Relations”. Annual SIGdial Meeting on Discourse and Dialogue (SIGDIAL), 2014.

Junyi Jessy Li and Ani Nenkova. “Reducing Sparsity Improves the Recognition of Implicit
Discourse Relations”. Annual SIGdial Meeting on Discourse and Dialogue (SIGDIAL), 2014.

**Patents**

Lucretia H. Vanderwende, Sumit Basu, Charles E. Jacobs and Junyi Li. “Generating High-Level Questions from Sentences”. US Patent Application US2016/0063879 A1

**Work Experience**

**Yahoo! Labs**, New York, NY

*Research intern with Kapil Thadani and Amanda Stent*

The role of discourse units, rhetorical structure and local coherence in automatic summarization and news highlight generation.

**Microsoft Research**, Redmond, WA

*Research intern with Lucy Vanderwende and Sumit Basu*

High level question generation in unstructured text using discourse analysis.

**University of Michigan**, Ann Arbor, MI

*Undergraduate research advisor: Eytan Adar*

Context-driven research advisor: Eytan Adar

**Teaching**

**University of Pennsylvania**, Philadelphia, PA

*Head teaching assistant, Computational Linguistics (CIS 530)*

Programming assignment design; programming tutorial lecturer; teaching assistant mentor.

*Teaching assistant, Computational Linguistics (CIS 530)*

Programming assignment design and grading; programming tutorial lecturer.

*Teaching assistant, Programming Languages and Techniques I (CIS 120)*

Programming lab session instructor; grader.

**Shanghai Jiao Tong University**, Shanghai, China

*Teaching Assistant, Introduction to Programming (VG 101)*

Programming lab session instructor; grader.

**Professional Activities**

*Program committee member*

European Chapter of the Association of Computational Linguistics EACL 2017

Student Research Workshop at the European Chapter of the Association of Computational Linguistics EACL-SRW 2017

Conference on Empirical Methods in Natural Language Processing EMNLP 2016

International Conference on Computational Linguistics COLING 2016

Student Research Workshop at the Association of Computational Linguistics ACL-SRW 2016

North American Chapter of the Association for Computational Linguistics — Human Language Technologies [Best reviewers] NAACL-HLT 2016

CoNLL Shared Task: Shallow Discourse Parsing CoNLL 2015

North American Chapter of the Association for Computational Linguistics — Human Language Technologies NAACL-HLT 2015

Mid-Atlantic Student Colloquium on Speech, Language and Learning MASC-SLL 2015

Student Research Workshop at the Association of Computational Linguistics ACL-SRW 2013

*Mentor*

Student Research Workshop at the Association of Computational Linguistics ACL-SRW 2016

*Session chair*
Local organizer
Young Researchers’ Roundtable on Spoken Dialog Systems  YRRSDS 2014
Computational Linguistics Colloquium Series, University of Pennsylvania  2013—2015

Student volunteer
Mid-Atlantic Student Colloquium on Speech, Language and Learning  MASC-SLL 2016

Paper reviewer
International World Wide Web Conference  WWW 2015
AAAI Conference on Artificial Intelligence  AAAI 2015
Recent Advances in Natural Language Processing  RANLP 2015
International Conference on Computational Linguistics  COLING 2014
Recent Advances in Natural Language Processing  RANLP 2013

Invited Talks
The Philadelphia Python Users Group (PhillyPUG)
Speciteller — an NLP Tool developed at UPenn  June 2016

Interactions Corporation
Understanding Text Specificity  June 2016

Women in Computer Science High School Open Day, University of Pennsylvania
How does the computer understand language?  Apr 2016

AP Computer Science Guest Lecture, Lower Merion High School, Ardmore PA
Natural Language Processing  Mar 2016

University of Maryland, College Park
Analyzing General and Specific Content in Text  Nov 2015

University of Pennsylvania Center for Undergraduate Research and Fellowships
Sentence Specificity  Sept 2015

Columbia University
Content-heavy Sentences in Cross-lingual Context  Sept 2015

Honors and Awards
Best paper nominee  SIGDIAL 2016
Best reviewer  NAACL-HLT 2016
AAAI/SIGAI Doctoral Consortium Scholarship  2016
University Honors, University of Michigan  Fall 2010, Spring 2011
Dean’s List, University of Michigan  Fall 2009 - Spring 2011
Outstanding Scholarship, Shanghai Jiao Tong University  Fall 2009
Dean’s List, Shanghai Jiao Tong University  Fall 2007 - Summer 2009