# Xinya Du

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**Research Areas** Natural Language Processing, Machine Learning

**Education** Cornell University, Ithaca, NY, USA

Ph.D. in Computer Science, Advisor: Prof. Claire Cardie 2016 – 2021 (Expected)

Shanghai Jiao Tong University, Shanghai, China

B.E. in Computer Science and Engineering, GPA Rank: Top 1% 2012 – 2016

**Publications** Event Extraction by Answering (Almost) Natural Questions

**Xinya Du** and Claire Cardie *Proceedings of EMNLP, 2020* 

Improving Event Duration Prediction via Time-aware Pre-training Zonglin Yang, **Xinya Du**, Alexander Rush and Claire Cardie

Proceedings of Findings of EMNLP, 2020

Document-Level Event Role Filler Extraction using Multi-Granularity Contextualized Encoding **Xinya Du** and Claire Cardie *Proceedings of ACL*, 2020

Leveraging Structured Metadata for Improving Question Answering on the Web **Xinya Du**, Ahmed Hassan Awadallah, Adam Fourney, Robert Sim, Paul Bennett and Claire Cardie *Proceedings of AACL*, 2020

Be Consistent! Improving Procedural Text Comprehension using Label Consistency **Xinya Du**, Bhavana Dalvi, Niket Tandon, Antoine Bosselut, Wen-tau Yih, Peter Clark, Claire Cardie *Proceedings of 17th North American Chapter of the Association for Computational Linguistics (NAACL)*, 2019

Harvesting Paragraph-Level Question-Answer Pairs from Wikipedia

Xinya Du and Claire Cardie

Proceedings of the 56th Annual Meeting of the Association for Computational Linguistics (ACL), 2018

Identifying Where to Focus in Reading Comprehension for Neural Question Generation **Xinya Du** and Claire Cardie

Proceedings of the 2017 Conference on Empirical Methods in Natural Language Processing (EMNLP), 2017

Learning to Ask: Neural Question Generation for Reading Comprehension

Xinya Du, Junru Shao and Claire Cardie

Proceedings of the 55th Annual Meeting of the Association for Computational Linguistics (ACL), 2017

- Featured in New Scientist, TechRepublic
- The first paper to propose learning-based methods for natural question generation, inspiring work in Question Answering (Alberti 2019), Summarization (Wang 2020), and Dialogue Systems (Laban 2020)

**Preprints** Document-level Event Entity Extraction Using Generative Template-filling Transformers

**Xinya Du**, Alexander M. Rush, and Claire Cardie Under Submission, https://arxiv.org/abs/2008.09249

Research Internships Allen Institute for Artificial Intelligence

Sep 2018 - Dec 2018

Topic: Improving Procedural Paragraph Understanding by Leveraging Consistency Contraints

Supervisors: Bhavana Dalvi, Peter Clark

**Microsoft Research Redmond** 

May 2018 - Aug 2018

Topic: Leveraging web-structured knowledge into plain text for machine reading/question

answering.

Supervisors: Paul Bennett, Ahmed Hassan Awadallah

Cornell NLP Group, Undergrad Research Intern

Aug 2015 – Dec 2015

Topic: Researched on deep learning techniques for fine-grained opinion extraction.

Supervisor: Prof. Claire Cardie

**Media Coverage** New Scientist: Inquisitive bot asks questions to test your understanding [Link]

**TechRepublic:** How researchers trained one AI system to start asking its own questions [Link]

**Talks** Harvesting Paragraph-Level Question-Answer Pairs from Wikipedia

ACL 2018, Jul 2018

LwLL: Progress on the NLP Front

DARPA site visit, Cornell University (Online), Apr 2020

Event Extraction by Answering (Almost) Natural Questions

UIUC Class Information Extraction and Knowledge Acquisition (Online), Sep 2020

EMNLP 2020 (Online), Nov 2020

Towards More Informed Extraction of Events from Documents

Rising Stars in Data Science Workshop at University of Chicago, Jan 2021

**Mentoring** Zonglin Yang, Cornell CS MEng student,

Spring 2020 – Present

with publication in Findings of EMNLP 2020

**Teaching** Natural Language Processing (TA for Prof. Claire Cardie), Fall 19.

Natural Language Processing (TA for Prof. Yoav Artzi), Spring 19.

Software Engineering (TA for Prof. William Arms), Spring 17, Spring 18.

Introduction to Computing Using Python (TA for Prof. Walker White), Fall 16.

Services Program Committee Member:

Year 2018: ACL, CoNLL, MRQA, W-NUT;

Year 2019: NAACL, ACL, EMNLP, CoNLL, \*SEM, W-NUT, IJCAI, AAAI;

Year 2020: ACL, IJCAI, EMNLP, AACL.

Journal Reviewer:

IEEE Transactions on Knowledge and Data Engineering (TKDE), AI Communications

**Student Volunteer:** 

ACL 2017, 2018; EMNLP 2017; Cornell CS PhD Visit Day 2019, 2020; Cornell CS PhD Admission Committee.

Awards & Scholarships

CDAC Rising Stars 2020

Outstanding Graduate of Shanghai Jiao Tong University 2016

National Scholarship (Highest honor for undergraduates in China, awarded to top 1% students.) 2013

National Olympiad in Mathematics in Provinces 2011, The First Prize. 2011

National Olympiad in Informatics in Provinces 2010, The First Prize. 2010

#### Code Release

#### NQG [Link]

Open source repository for neural question generation from sentences (ACL 2017). Including evaluation scripts and implementations for the models.

## EEQA [Link]

Open source repository for using QA techniques for extracting events from text (EMNLP 2020). Including different question templates and implementations for the models.

## **Document Event Entity Extractor [Link]**

Open source repository for document-level entity extraction.

Including implementations for our model, evaluation scripts for document-level extraction, and analysis for predictions.

## References

## **Claire Cardie**

Professor, Department of Computer Science and Department of Information Science Cornell University cardie@cs.cornell.edu

## Alexander M. Rush

Associate Professor, Department of Computer Science Cornell University arush@cornell.edu

#### Peter Clark

Senior Research Manager Allen Institute for Artificial Intelligence (AI2) peterc@allenai.org

#### **Ahmed Hassan Awadallah**

Principal Research Manager, Language and Information Technologies Team Microsoft Research AI hassanam@microsoft.com

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