Zeqiu (Ellen) Wu

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Education

University of Washington — *Seattle, WA*
PHD CANDIDATE, ELECTRICAL & COMPUTER ENGINEERING DEPARTMENT — *2018 - PRESENT*
- Advisors: Mari Ostendorf & Hannaneh Hajishirzi (NLP Research Group)

University of Illinois — *Urbana, IL*
M.S. IN COMPUTER SCIENCE — *2016 - 2018*
- Advisor: Jiawei Han (Data Mining Research Group)

University of Illinois — *Urbana, IL*
B.S. IN ELECTRICAL ENGINEERING, WITH MINORS IN COMPUTER SCIENCE, MATH AND BUSINESS — *2010 - 2014*

Honors & Awards

2018	**University of Washington Top Scholar Recruitment Fellowship**
2017	**SIGIR Student Travel Grant**
2014	**Highest Honor Graduate**
2014	**James Scholar**
2010-2014	**Dean's list**
2014	**Brian & Sophie Leung Scholarship**
2013	**Professor N. Narayana Rao Scholarship**

Publications

A controllable model of grounded response generation
Z. WU, M. GALLEY, C. BROCKETT, Y. ZHANG, X. GAO, C. QUIRK, R. K. KEDZIORSKI, J. GAO, H. HAJISHIRZI, M. OSTENDORF, B. DOLAN. *Preprint.*

Extracting Summary Knowledge Graphs from Long Documents
Z. WU, R. K. KEDZIORSKI, M. OSTENDORF, H. HAJISHIRZI. *Preprint.*

HiExpan: Task-Guided Taxonomy Construction by Hierarchical Tree Expansion
J. SHEN, Z. WU, D. LEI, C. ZHANG, X. REN, M. T. VANNI, B. M. SADLER AND J. HAN. *KDD, 2018.*

Indirect Supervision for Relation Extraction Using Question-Answer Pairs
Z. WU, X. REN, F. F. XU, J. LI, J. HAN. *WSDM, 2018.*

SetExpan: Corpus-Based Set Expansion via Context Feature Selection and Rank Ensemble
J. SHEN*, Z. WU*, D. LEI, J. SHANG, X. REN, J. HAN. *ECML-PKDD, 2017.*

CoType: Joint Extraction of Typed Entities and Relations with Knowledge Bases
X. REN, Z. WU, W. HE, M. QU, C. R. VOSS, H. JI, T. F. ABDELZAHER, J. HAN. *WWW, 2017.*

Life-iNet: A Structured Network-Based Knowledge Exploration and Analytics System for Life Sciences
X. REN, J. SHEN, M. QU, X. WANG, Z. WU, Q. ZHU, M. JIANG, F. TAO, S. SINHA, D. LIEM, P. PING, R. WEINSHILBOUM, J. HAN. (SYSTEM DEMO) *ACL, 2017.*

Research Experience

UW NLP Research Group — *Seattle, WA*
ADVISORS: MARI OSTENDORF & HANNANEH HAJISHIRZI — *Fall 2018 – Present*
- Built a ***grounded response generation system*** by leveraging question-answering techniques to identify salient information from grounding for response generation.
- Proposed a new text-to-data task, ***document summarization using structured relational graphs***, together with evaluation metrics for the task. Implemented and assessed strong baselines as well as a new approach based on graph learning.
- Proposed to apply dialogue state tracking techniques to do early ***conversations summarization with structures***, which would be used for response generation in the target conversation.

Microsoft Research NLP Team   *Redmond, WA*
MENTORS: MICHEL GALLEY & BILL DOLAN   *Summer 2019 & Summer 2020*

- Built a **controllable and knowledge-grounded dialogue response generation model** and analyzed how adding control and grounding leads to better generated responses.
- Proposed the task and evaluation metrics of **template induction** from similar documents to assist user writing, and built strong baselines for it.

UIUC Data Mining Research Group   *Urbana, IL*
ADVISOR: JIAWEI HAN   *Fall 2016 – Spring 2018*

- Improved **distantly supervised information extraction** (detection/classification of entities and relation triples in unstructured text corpora), which replaces human annotation with linking to knowledge bases, by developing noise-robust systems that extract entities and relations.
- Designed and built systems that facilitate automatic **faceted taxonomy construction** from any given text corpus in scientific domains, with a small number of user-provided seed examples.

UIUC MRI Lab   *Urbana, IL*
ADVISOR: ZHI-PEI LIANG   *Spring 2012 - Summer 2012*

- Applied signal processing techniques to optimize real-time cardiac image reconstruction and de-noise dynamic MRI.

Industry Experience

IXL Learning   *San Mateo, CA*
SOFTWARE ENGINEER, PRODUCT TEAM   *2015 - 2016*

- Maintained and developed IXL web education application and data analysis reporting systems.

Goldman Sachs   *New York, NY*
SOFTWARE ENGINEER, FIXED INCOME PRODUCTS TEAM   *Summer 2013 & 2014 - 2015*

- Built a market data monitoring system to inform high frequency traders of data trustworthiness.
- Developed the scalable fixed-income trading applications for daily trading, clearing and reporting.

Altera Corporation   *San Jose, CA*
SOFTWARE ENGINEER INTERN, FPGA COMPILER TEAM   *Fall 2012*

- Worked on FPGA synthesis optimization and language extraction.

Teaching Experience

EE 511 (Introduction to Statistical Learning), UW ECE Department   *Seattle, WA*
TEACHING ASSISTANT   *Winter 2019*

CS 412 (Introduction to Data Mining), UIUC CS Department   *Urbana, IL*
TEACHING ASSISTANT   *Fall 2016 & Spring 2018*

Miscellaneous

Sep 2020 **Nominee, Microsoft Research AI Breakthroughs Workshop**   *Redmond, WA*
2017-2018 **Visitor Coordinator, Data Mining Research Group**   *Urbana, IL*
2011-2012 **Alumni Chair, Women in Electrical and Computer Engineering** *Urbana, IL*