

Zequiu (Ellen) Wu

215A EE/CSE, University of Washington, Seattle, WA 98195

☎ (+1) 650-391-8762 | ✉ zequiuwu1@uw.edu | 🏠 ellenmellon.github.io | 📱 ellenmellon | 📺 zequiuwu1

My current research is focused on designing algorithms for language/knowledge representation to facilitate downstream applications like dialogue, question answering systems. I am actively looking for summer internships in relevant areas.

Education

University of Washington

Seattle, WA

PHD IN ELECTRICAL & COMPUTER ENGINEERING

2018 - PRESENT

- Advisors: Mari Ostendorf & Hannaneh Hajishirzi (NLP Research Group)

University of Illinois

Urbana, IL

M.S. IN COMPUTER SCIENCE (CGPA 3.93/4.0)

2016 - 2018

- Advisor: Jiawei Han (Data Mining Research Group)

University of Illinois

Urbana, IL

B.S. IN ELECTRICAL ENGINEERING (CGPA 3.93/4.0), WITH MINORS IN COMPUTER SCIENCE, MATH AND BUSINESS

2010 - 2014

- Highest Honor Graduate, James Scholar, Dean's list

Awards

2018 **University of Washington Top Scholar Recruitment Fellowship**

2017 **SIGIR Student Travel Grant**

2014 **Brian & Sophie Leung Scholarship**

2013 **Professor N. Narayana Rao Scholarship**

Publications

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.

Improving Question Answering Sentence Ranking by Rank Propagation

H. NG, X. WANG, X. ZHANG, Z. WU. KBCOM WORKSHOP AT WSDM, 2018.

Research Experience

UW NLP Research Group

Seattle, WA

ADVISORS: MARI OSTENDORF & HANNANEH HAJISHIRZI

Fall 2018 - Present

- Work on projects with the aim to enrich information in automatically generated responses from **context-grounded dialogue systems**, by incorporating contextual and external knowledge (in both structured and unstructured forms).
- Analyze various neural network structures that take both dialogue history and contextual information (to which the dialogue is grounded) as inputs, and generate the next dialogue response.

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 extracts 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

GrapeTech

Shanghai, China

Co-FOUNDER

2016 - 2018

- GrapeTech was a startup in Shanghai, providing a platform HackX to promote technology innovation.
- Helped organizing Hackathon events, building business connections and launching the website for HackX.

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 next-gen, 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

CS 412 (Data Mining)

Urbana, IL

TEACHING ASSISTANT

Fall 2016 & Spring 2018

Miscellaneous

2017-2018 **Visitor Coordinator, Data Mining Research Group**

Urbana, IL

2011-2012 **Alumni Chair, Women in Electrical and Computer Engineering**

Urbana, IL

2012 **Member, UIUC Silicon Valley Workshop**

Urbana, IL

2010-2014 **Member, Phi Eta Sigma Honor Society**

Urbana, IL