# Wenhao Yu

# CONTACT INFORMATION

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### RESEARCH INTERESTS

- Machine Learning
- Natural Language Generation
- Information Retrieval
- Question Answering System

# EDUCATION EXPERIENCE

University of Notre Dame, IN, US

Ph.D. in Computer Science and Engineering

• Advisor: Professor Meng Jiang

**Sichuan University, Chengdu, China** B.S. in Computer Science and Technology

GPA: 3.95/4.0

Aug. 2019 - Now

Aug. 2015 – Jul. 2019 GPA: 3.84/4.0

#### **PUBLICATIONS**

[C4] Wenhao Yu, Lingfei Wu, Qingkai Zeng, Shu Tao, Yu Deng, Meng Jiang. "Crossing Variational Autoencoders for Answer Retrieval", in Proceedings of Annual Conference of the Association for Computational Linguistics (ACL), 2020.

[C3] **Wenhao Yu**, Mengxia Yu, Tong Zhao, Meng Jiang. "Identifying Referential Intention with Heterogeneous Contexts", in Proceeding of the Web Conference (**WWW**), 2020. (Oral Presentation)

[C2] Wenhao Yu, Wei Peng, Yu Shu, Qingkai Zeng, Meng Jiang. "Experimental Evidence Extraction in Data Science with Hybrid Table Features and Ensemble Learning", in Proceeding of the Web Conference (WWW), 2020. (Oral Presentation)

[W2] **Wenhao Yu**, Lingfei Wu, Shu Tao, Yu Deng, Qingkai Zeng, Meng Jiang. "Generating Helpful Responses for Intelligent Tech Support," in the Workshop on Reasoning for Complex QA (RCQA) in conjunction with AAAI Conference on Artificial Intelligence (**AAAI**), 2020.

[W1] Qingkai Zeng, Mengxia Yu, **Wenhao Yu**, Jinjun Xiong, Yiyu Shi, Meng Jiang. "Faceted Hierarchy: A New Graph Type to Organize Scientific Concepts and a Construction Method," in the Workshop on Graph-Based Natural Language Processing (TextGraphs) in conjunction with Conference on Empirical Methods in Natural Language Processing (**EMNLP**), 2019.

[C1] **Wenhao Yu**, Zongze Li, Qingkai Zeng and Meng Jiang. "Tablepedia: Automating PDF Table Reading in an Experimental Evidence Exploration and Analytic System," in Proceeding of International World Wide Web Conference (**WWW**), 2019.

### **PROJECTS**

## **Tablepedia: Automatic Table Reading for Experimental Evidence**

Supervised by Prof. Meng Jiang

July 2018 - September 2019

- Proposed an experimental evidence extraction system to automate the integration of tables (in the paper PDFs) into a database of experimental results.
- Proposed hybrid features including structural and semantic table features as well as an ensemble learning approach for table unification.

## **Identifying Referential Intention with Heterogenerous Contexts**

Supervised by Prof. Meng Jiang

July 2019 - December 2019

- Proposed a novel scheme in detecting referential intention commonly in academia, news and social media based on a theory in behavioral and social sciences.
- Proposed a neural framework with Interactive Hierarchical Attention to identify intentions of referential behavior by aggregating heterogeneous contexts.

# **Complex Question Answering Generation for Tech Support**

Supervised by Prof. Meng Jiang and Dr. Lingfei Wu

July 2019 - Now

• Proposed to *cross* variational auto-encoders by generating questions with aligned answers and generating answers with aligned questions, which outperforms the state-of-the-art answer retrieval method on SQuAD.

TEACHING Experience	ND CSE-40647/60647: Data Science • Teaching assistant for Professor Meng Jiang	Fall 2019
HONORS AND	First Place at 14th Annual Poster Contest at ND CSE	2020
Awards	Notre Dame CSE Department Selected Fellowship	2019
	Tang Lixin Excellent Student Scholarship (0.1%)	2018
	National Undergraduate Scholarship of China (1%)	2017
TECHNICAL	Programming Languages: Python, MATLAB, C++	
STRENGTHS	Deep Learning Tools: PyTorch, TensorFlow, DGL	
	Computer Skills: Git, I≜TEX, Linux Shell, MS Offices	
SERVICES	Invited Reviewer of ACM Transactions on Knowledge Discovery from Data (TKDD) Invited Reviewer of International Journal of Intelligent Systems (IJIS)	