# WENHU CHEN

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#### ABOUT ME

I'm currently a Ph.D student in Computer Science Department of University of California, Santa Barbara supervised by William Wang and Xifeng Yan. My research interests lie in natural language processing and deep learning. Primarily, I work on natural language processing under structured or semi-structured data like tables [21,20,18,15], KB [22,17,4], etc. I'm mainly interested in tasks like question answering [21,19], text generation [22,20,18,11], fact-checking [16,15] and other related understanding tasks [10,7]. Besides, I'm also interested in variational inference [12,8,4], multi-modality problems [19,16,5,2], and machine translation [6,3,1], etc. My research goal is to bring together free-form textual knowledge and structured symbolic knowledge to build the new-generation AI system.

#### CONFERENCE PUBLICATIONS

- [22] KGLM: Pretrained Knowledge-Grounded Language Model for Data-to-Text Generation Wenhu Chen, Yu Su, Xifeng Yan, William Yang Wang. Proceedings of EMNLP 2020
- [21] HybridQA: A Dataset of Multi-Hop Question Answering over Tabular and Textual Data Wenhu Chen, Hanwen Zha, Zhiyu Chen, Wenhan Xiong, Hong Wang, William Wang. Proceedings of EMNLP 2020 (Findings)
- [20] Logic2Text: High-Fidelity Natural Language Generation from Logical Forms

Zhiyu Chen, <u>Wenhu Chen</u>, Hanwen Zha, Xiyou Zhou, Yunkai Zhang, Sairam Sundaresan, William Yang Wang. Proceedings of EMNLP 2020 (Findings)

[19] Meta Module Network for Compositional Visual Reasoning

Wenhu Chen, Zhe Gan, Linjie Li, Yu Cheng, William Wang, Jingjing Liu. Proceedings of WACV 2021, Hawaii, USA (Oral)

[18] Logical Natural Language Generation from Open-Domain Tables

Wenhu Chen, Jianshu Chen, Yu Su, Zhiyu Chen and William Yang Wang. Proceedings of ACL 2020, Seattle, USA (Long)

[17] Few-shot NLG with Pre-trained Language Model

Zhiyu Chen, Harini Eavani, Wenhu Chen, Yinyin Liu and William Yang Wang. Proceedings of ACL 2020, Seattle, USA (Short)

[16] VIOLIN: A Large-Scale Dataset for Video-and-Language Inference

Jingzhou Liu, Wenhu Chen, Yu Cheng, Zhe Gan, Licheng Yu, Yiming Yang, Jingjing Liu. Proceedings of CVPR 2020, Seattle, USA (Poster)

[15] TabFact: A Large-scale Dataset for Table-based Fact Verification

Wenhu Chen, Hongmin Wang, Jianshu Chen, Yunkai Zhang, Hong Wang, Shiyang Li, Xiyou Zhou and William Yang Wang. Proceedings of ICLR 2020, Addis Ababa, Ethiopia (Poster)

[14] Generative Adversarial Zero-Shot Relational Learning for Knowledge Graphs

Pengda Qin, Xin Wang, <u>Wenhu Chen</u>, Chunyun Zhang, Weiran Xu, William Yang Wang. Proceedings of AAAI 2020, New York, USA (Oral)

[13] Enhancing the Locality and Breaking the Memory Bottleneck of Transformer on Time Series Forecasting

Shiyang Li, Xiaoyong Jin, Yao Xuan, Xiyou Zhou, <u>Wenhu Chen</u>, Yu-Xiang Wang, Xifeng Yan. Proceedings of NeurIPS 2019, Vancouver, Canada (Poster)

[12] Interpreting and Improving Deep Neural SLU Models via Vocabulary Importance

Yilin Shen, Wenhu Chen, Hongxia Jin. Proceedings of INTERSPEECH 2019, Graz, Austria (Oral)

[11] Semantically Conditioned Dialog Response Generation via Hierarchical Disentangled Self-Attention

Wenhu Chen, Jianshu Chen, Pengda Qin, Xifeng Yan and William Yang Wang. Proceedings of ACL 2019,

Florence, Italy (Long Poster)

# [10] Global Textual Relation Embedding for Relational Understanding

Zhiyu Chen, Hanwen Zha, Honglei Liu, <u>Wenhu Chen</u>, Xifeng Yan and Yu Su. Proceedings of ACL 2019, Florence, Italy (Short Poster)

# [9] Mining Algorithm Roadmap in Scientific Publications

Hanwen Zha, Wenhu Chen, Keqian Li and Xifeng Yan. Proceedings of KDD 2019, Alaska, USA (Research Track, Oral)

# [8] How Large A Vocabulary Does Text Classification Need? A Variational Approach on Vocabulary Selection

Wenhu Chen, Yu Su, Yilin Shen, Zhiyu Chen, Xifeng Yan and William Yang Wang. Proceedings of NAACL 2019, Minneapolis, USA (Long Oral)

#### [7] XL-NBT: A Cross-lingual Neural Belief Tracking Framework

Wenhu Chen, Jianshu Chen, Yu Su, Xin Wang, Dong Yu, Xifeng Yan and William Yang Wang. Proceedings of EMNLP 2018, Brussel, Belgium (Long Paper)

# [6] Triangular Architecture for Rare Language Translation

Shuo Ren, Wenhu Chen, Shujie Liu, Mu Li, Ming Zhou and Shuai Ma. Proceedings of ACL 2018, Melbourne, Australia (Long Oral)

# [5] No Metrics Are Perfect: Adversarial Reward Learning for Visual Storytelling

Wenhu Chen\*, Xin Wang\*, Yuan-Fang Wang and William Yang Wang. Proceedings of ACL 2018, Melbourne, Australia (Long Oral)

#### [4] Variational Knowledge Graph Reasoning

Wenhu Chen, Wenhan Xiong, William Yang Wang, Xifeng Yan. Proceedings of NAACL 2018, New Orleans, USA (Long Oral)

## [3] Generative Bridging Network in Neural Sequence Prediction

Wenhu Chen, Guanlin Li, Shuo Ren, Shujie Liu, Zhirui Zhang, Mu Li, Ming Zhou. Proceedings of NAACL 2018, New Orleans, UAS (Long Poster)

#### [2] Video Captioning via Hierarchical Reinforcement Learning

Xin Wang, <u>Wenhu Chen</u>, Jiawei Wu, Yuan-fang Wang, William Yang Wang. Proceedings of CVPR 2018, Salt Lake City, USA (Poster)

#### [1] Guided alignment training for topic-aware neural machine translation

Wenhu Chen, Evgeny Matusov, Shahram Khadivi, JT Peter. AMTA 2016, Austin, TX (Poster)

## **SERVICE**

2018: Program Committee in Socal-NLP, EMNLP

2019: Program Committee in AAAI, NAACL, ICML, ACL, NeurIPS, TACL, EMNLP

2020: Program Committee in AAAI, ACL, ICML, EMNLP, NeurIPS

2021: Program Committee in ICLR

#### **EDUCATION**

#### University of California, Santa Barbara

Sep 2017-Now

Ph.D in Computer Science

Advisor: Xifeng Yan and William Wang

Overall GPA: 3.95/4.0

# ETH Zurich, Switzerland

June 2016-Dec 2016

Visiting in Computer Science

Overall GPA: 6.0/6.0

#### RWTH Aachen University, Germany

Sep 2014-Dec 2016

M.Sc. in Electronics Engineering

Overall GPA: 1.4/1.0

# Huazhong University of Science and Technology, China

Sep 2010-June 2014

B.Sc. in Electronics Engineering

Overall GPA: 86/100

#### **EXPERIENCE**

Google ResearchSep 2020 - Dec 2020Student Researcher ProgramPittsburgh, USA

· Work on Open-Domain Question Answering Systems

Google Research
Research Intern

June 2020 - Sep 2020
Pittsburgh, USA

· Designed Open-Domain Question Answering Systems

Microsoft AI & Cloud

Research Intern

June 2019 - Sep 2019

Bellevue, USA

· Designed modular network for visual question answering (CVPR 2020, WACV 2021)

Samsung Research America

June 2018 - Sep 2018 Mountain View, USA

· Designed model compression algorithm for NLP tasks (NAACL 2019, INTERSPEECH 2019)

Microsoft Research Asia

Feb 2017 - Aug 2017

Research Intern

Research Intern

Beijing, China

· Designed data-augmentation algorithm for sequence learning (NAACL 2018, ACL 2018)

eBay Research
Research Intern

December 2015 - June 2016
Aachen, Germany

· Investigated the usage of statistical alignment in neural machine translation (AMTA 2016)

#### AWARD

**Tencent AI Gift Award:** Awarded the Tencent AI Gift Fund for PhD sponsorship.

IDEA Research Grant: Awarded IDEA research scholarship for exchange program in ETH.

German National Scholarship: Awarded a one-year scholarship sponsored by Robert Bosch Inc.

China Scholarship Committee Scholarship: Awarded full scholarship from CSC for a one-year exchange program in Germany.

MCM Finalist Award: Ranked top 0.5% in The Mathematical Contest in Modeling in 2013.