# Wenhan Xiong

University of California, Santa Barbara Department of Computer Science 3120B, Harold Frank Hall Santa Barbara, California, 93106

Phone: (805) 252-1636 Email: xwhan@cs.ucsb.edu

Homepage: https://xwhan.github.io/

#### **Research Interests**

My Ph.D. research focuses on AI (especially NLP) tasks that require effective knowledge extraction and reasoning. In the previous three years, I have developed

- Explainable and Few-Shot Relational Knowledge Reasoning methods for large-scale real-world knowledge graphs (EMNLP 2017, NAACL 2017, EMNLP 2018);
- Intelligent language grounding agents that sequentially interact with the world by **grounding natural language with physical world knowledge** (IJCAI 2018, ECCV 2018);
- Heterogeneous Knowledge-Aware QA models that aggregate evidence from structured knowledge and unstructured natural language to effectively answer questions (ACL 2019)

## **Education**

- University of California, Santa Barbara
  Ph.D. in Computer Science, 2016-2021 (expected)
- University of Science and Technology of China (Ranking: 2/67) B.E. in EE, 2012-2016.

## Experience

- Industry:
  - Research Intern, Facebook AI, Menlo Park, Summer 2019
    - working with Ves Stoyanov and Jingfei Du on Large-Scale Knowledge-Enhanced Pretraining
  - Research Intern, Salesforce Research (MetaMind), Palo Alto, Summer 2019
    - working with Caiming Xiong on QA and Continual Learning
- Program Committee: EMNLP'18, AAAI'19, NAACL'19, EMNLP'19, AAAI'20, MRQA'19

#### **Publications**

- 11. Jiawei Wu, Wenhan Xiong and William Yang Wang, "Learning to Learn and Predict: A Meta-Learning Approach for Multi-Label Classification", EMNLP 2019
- 10. Wenhan Xiong, Jiawei Wu, Hong Wang, Vivek Kulkarni, Mo Yu, Xiaoxiao Guo, Shiyu Chang and William Yang Wang, "TweetQA: A Social Media Focused Question Answering Dataset", ACL 2019, Oral Presentation

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9. **Wenhan Xiong**, Mo Yu, Shiyu Chang, Xiaoxiao Guo and William Yang Wang, "Improving Question Answering over Incomplete KBs with Knowledge-Aware Reader", ACL 2019, Oral Presentation

- 8. Hong Wang, Xin Wang, Wenhan Xiong, Mo Yu, Xiaoxiao Guo, Shiyu Chang and William Yang Wang, "Self-Supervised Learning for Contextualized Extractive Summarization", ACL 2019
- 7. Wenhan Xiong, Jiawei Wu, Deren Lei, Mo Yu, Shiyu Chang, Xiaoxiao Guo, William Yang Wang, "Imposing Label-Relational Inductive Biasfor Extremely Fine-Grained Entity Typing", NAACL 2019
- 6. Hong Wang, Wenhan Xiong, Mo Yu, Xiaoxiao Guo, Shiyu Chang, William Yang Wang, "Sentence Embedding Alignment for Lifelong Relation Extraction", NAACL 2019
- 5. Wenhan Xiong, Mo Yu, Shiyu Chang, Xiaoxiao Guo, William Yang Wang, "One-Shot Relational Learning for Knowledge Graphs", EMNLP 2018
- 4. Wenhan Xiong, Xin Wang, Hongmin Wang, William Yang Wang, "Look Before You Leap: Bridging Model-Free and Model-Based Reinforcement Learning for Planned-Ahead Vision-and-Language Navigation", ECCV 2018
- 3. Wenhan Xiong, Xiaoxiao Guo, Mo Yu, Shiyu Chang, Bowen Zhou and William Yang Wang, "Scheduled Policy Optimization for Natural Language Communication with Intelligent Agents", IJCAI-ECAI 2018, Oral Presentation
- 2. Wenhu Chen, **Wenhan Xiong**, Xifeng Yan and William Yang Wang, "Variational Knowledge Graph Reasoning", NAACL 2018, <u>Oral Presentation</u>
- 1. Wenhan Xiong, Thien Hoang and William Yang Wang, "DeepPath: A Reinforcement Learning Method for Knowledge Graph Reasoning", EMNLP 2017, Oral Presentation

#### Awards & Honors

- Summer Research Fellowship, University of California, Santa Barbara, 2017
- National Scholarship (4/291), University of Science and Technology of China, 2015
- Outstanding Research Performance, University of Western Australia, 2015
- Outstanding Student Scholarship (Gold Prize), University of Science and Technology of China, 2014

# Teaching

- Teaching Assistant, CS32 Object Oriented Design and Implementation, UCSB, Spring 2017
- Teaching Assistant, CS171 Operating Systems, UCSB, Winter 2017
- Teaching Assistant, CS8 Intro to Programming, UCSB, Fall 2017

### **Talks**

Scheduled Policy Optimization for Language Grounding, SoCal NLP Symposium 2018