XUEQING WU

(217)-305-0509 ⋄ xueqing8@illinois.edu ⋄ shirley-wu.github.io ⋄ google scholar

EDUCATION

University of Illinois Urbana-Champaign 08/2021 - Present
MS (thesis-based) in Computer Science. Advisor: Prof. Heng Ji

University of Science and Technology of China 09/2016 - 06/2020
BS in Electronic Engineering and Information Science.
GPA: 4.03/4.30 (rank: 1/363). Graduated with Guo Moruo scholarship (top 1%).

INTERNSHIP & RESEARCH

Bytedance AI Lab (Beijing, China) 07/2020 - 07/2021
Research Intern. Mentor: Hang Li

· Proposed and benchmarked a novel IE setting which extracts table-format information and requires no pre-defined schema. Adopted a seq2seq approach and employed constrained decoding and table embeddings to improve generation, which significantly outperforms NER and RE. [1]

Microsoft Research Asia (Beijing, China) 10/2019 - 07/2020
Research Intern. Mentor: Tao Qin

· Proposed a new sequence learning framework, which boosts a given main task using *temporally correlated tasks* as auxiliary training tasks. Designed a novel algorithm using RL to jointly train the task scheduler, and improved the baselines on four simultaneous translation tasks and a stock forecasting task. [2]
· Improved context-aware machine translation by using BERT as context encoder and compared three feature aggregation methods. Achieved state-of-the-art scores on three datasets. [3]
· Developed a simple but effective data augmentation method for machine translation based on sentence concatenation and improved the performance on nine datasets. [4]

University of Science and Technology of China (Hefei, China) 03/2019 - 06/2019
Research Assistant. Mentor: Prof. Jun Du

· Proposed two techniques for oriented object detection in aerial images: a novel tilt angle representation to avoid ambiguity, and an IoU calculation method to increase positive candidates of long objects in RPN stage. Won the first prize (32 in total) in ODAI Challenge-2019 held by CVPR. [5]

PUBLICATIONS

[1] **Xueqing Wu**, Jiacheng Zhang, Hang Li, *Text-to-Table: A New Way of Information Extraction*, Arxiv 2109 (in submission). 2021. Link
[2] **Xueqing Wu**, Lewen Wang, Yingce Xia, Weiqing Liu, Lijun Wu, Shufang Xie, Tao Qin, Tie-Yan Liu, *Temporally Correlated Task Scheduling for Sequence Learning*, ICML. 2021. Link
[3] **Xueqing Wu**, Yingce Xia, Jinhua Zhu, Lijun Wu, Shufang Xie, Tao Qin, *A Study of BERT for Context-Aware Neural Machine Translation*, ACML journal track (to appear). 2021.
[4] **Xueqing Wu**, Yingce Xia, Jinhua Zhu, Lijun Wu, Shufang Xie, Yang Fan, Tao Qin, *mixSeq: A Simple Data Augmentation Methodfor Neural Machine Translation*, IWSLT Workshop. 2021. Link
[5] Yixing Zhu, Jun Du, **Xueqing Wu**, *Adaptive Period Embedding for Representing Oriented Objects in Aerial Images*, IEEE Transactions on Geoscience and Remote Sensing. 2020. Link

SKILLS

Language: Python, C++, Java. **Deep learning**: PyTorch, fairseq, transformers. **OS**: Debian.