Wu, Dekun 吳德坤

Email: dew104@pitt.edu / jackwu502@hotmail.com Personal page: jackwu502.github.io

EDUCATION

University of Pittsburgh, Pittsburgh, USA

Jan 2021 - Present

PhD of Computer Science - Department of Computer Science

• Academic Advisor: Prof. Adriana Kovashka

York University, Toronto, Canada

Sep 2016 - May 2019

Master of Computer Science - Department of Electrical Engineering and Computer Science

• Supervisor: Prof. Hui Jiang

• Supervisory committee members: Prof. Manos Papagelis

Sichuan University, Chengdu, China

Sep 2011 - Jun 2015

Bachelor of Software Engineering - School of Software Engineering

WORKING EXPERIENCE

StatNLP Lab

Jul 2019-Jan 2020

Singapore University of Technology and Design

Singapore

Visiting Student (Supervised by Prof. Wei Lu)

Created a Text Generation dataset consisting of 110,000 triplet-question pairs extracted from Wikidata and Wikipedia respectively. Ran some baseline models such as seq2seq and GraphTransformer of which performances are examined by using automatic evaluation metrics: BLEU, ROGUE, TER, etc. This code and data are available for public use at https://github.com/LiyingCheng95/EntityDescriptionGeneration.

iNCML lab, May 2018-May 2019

York University Toronto, Canada

Research Assistant (Supervised by Prof. Hui Jiang)

Combined FOFE, a fixed-size, ordinally forgetting encoding method with a deep feed-forward neural network to deal with three Knowledge Base Question Answering (KBQA) subtasks: named entity recognition, entity linking and relation detection. Each subtask is dealt with by a single FOFE model that is stacked upon one another to form a KBQA pipeline. Tested pipeline on two popular datasets and a newly-created dataset and yielded competitive results on all of them.

Collected questions that are independently composed for human contestants in trivia-like competitions from various sources, which are further processed and formatted into a trivia-like KBQA dataset that consists of 28,348 questions. This dataset was released for public use at https://github.com/infinitecold/FreebaseQA.

Software Engineer (Intern)

Chengdu, China

Customized SAP Business ByDesign –a cloud ERP product intended for small and medium-sized enterprises –based on customer requirements such as product form amendments, changing fields and table layouts, revision of data processing logic and adding a report generation function.

AWARDS

| YU Graduate Fellowship - Masters International, York University, | 2016-2018 |
|--|-----------|
| Outstanding Undergraduate Student Award, Sichuan University, | 2014 |
| First-class Scholarship, Sichuan University, | 2014 |
| Third-class Scholarship, Sichuan University, | 2013 |

TEACHING EXPERIENCE

Department of Engineering and Computer Science

Sep 2016-Aug 2018

York University

Toronto, Canada

Teaching Assistant

Courses: Fundamentals of Data Structure, Advanced Object Oriented Programming, Programming for Mobile Computing (Android Programming)

Duties: Ran weekly lab sessions. Graded assignments. Invigilated and graded the mid-term and final. Held weekly office hours.

PUBLICATIONS

L. Cheng, **D. Wu**, L. Bing, Y. Zhang, Z. Jie, W. Lu, L. Si, ENT-DESC: Entity Description Generation by Exploring Knowledge Graph, **In Proceedings of EMNLP 2020 (Long Paper)**.

K. Jiang*, **D. Wu***, and H. Jiang, FreebaseQA: A New Factoid QA Data Set Matching Trivia-Style Question-Answer Pairs with Freebase, **In Proceedings of NAACL-HLT 2019.** (Short Paper, * denotes equal contribution)

PREPRINTS AND WORKSHOPS

BX. Chen, R. Sahdev, **D. Wu**, X. Zhao, M. Papagelis and JK. Tsotsos, Scene Classification in Indoor Environments for Robots using Word Embeddings, In *ICRA 2018 Workshop: Representing a Complex World*.

D. Wu, N. Nosirova, H. Jiang and M. Xu, A General FOFE-net Framework for Simple and Effective Question Answering over Knowledge Bases, *arXiv:1903.12356*

STANDARDIZED TESTS

TOEFL COMPUTER-BASED: Total: 106 (R: 29 L: 29 S: 22 W: 26) GRE COMPUTER-BASED: Total: 324 + 3.5 (Q: 166 V: 158 AW: 3.5)