CONGCONG WANG

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ABSTRACT

I am a third-year PhD student in the School of Computer Science, University College Dublin, under the supervision of Dr. David Lillis. My PhD research focuses on exploring computational techniques to process big crisis data on social media, which aims to help humanitarian advocates gain situational awareness and actionable information to improve their decision-making processes. Aside from research, I am interested in implementing and open sourcing projects that I feel hard to get from online.

EDUCATION

University College Dublin

September 2018 - Present

Ph.D. with Scholarship from the School of Computer Science PG Grant School of Computer Science and Informatics (CSI)

University College Dublin

September 2017 - July 2018

4th Year of B.Sc. (Hons.) Software Engineering, CSI

First Class Honors

Relevant Coursework: Data Analytics, Machine Learning, Computing Performance Evaluation, Contemporary Software Development, Operating Systems, Computer Network, Computer Security.

Thesis: Evaluating Recommender Systems (A Grade)

Beijing University of Technology, China

September 2014 - July 2017

1st - 3rd Years of B.Sc. (Hons.) Software Engineering, Beijing-Dublin International College (BDIC) Relevant Coursework: Object-oriented Programming, Software Project Development, Computer Vision, Distributed System, Database Management, Web Development, Data Structures and Algorithms.

SKILLS

Research NLP, Information Retrieval, Machine Learning, Social Media Analytics

General Python (preferred), Java, Web Application, Linux, DevOps

Languages Mandarin (First), English (Fluent)

WORK EXPERIENCE

Teaching Assistant

September 2015 - June 2017

Beijing-Dublin International College, China

I was the seminar leader on the Information Retrieval course, responsible for support and assessment of 80 students.

Programming Instructor (Python)

September 2015 - June 2016

YiXinXian (startup) Technology Education Company, China

I was a Python instructor for one year, my duties included writing tutorials and assessing students. I adopted the use of funny storytelling to explain concepts to students.

Covid19-search Mar, 2020

Work from home, Dublin

a retrieval system for searching insights from covid-related academic articles.

TREC Incident Streams Participation

January 2019 - September 2019

National Institute of Standards and Technology, U.S.

I submitted several runs of finding crisis-related actionable tweets and estimating their criticality using ensemble learning techniques. Some of the runs achieve competitive performance compared to other groups.

Research Assistant

December 2016 - June 2017

China Center for Information Industry Development, China

This is a group project with my peers. We developed a library indexing and borrowing system. This was used for book indexing construction and research on Chinese-based book items retrieval techniques. This project finally won 2nd place prize for the China Software Cup.

PUBLICATIONS

Congcong Wang, and David Lillis. UCD-CS at W-NUT 2020 Shared Task-3: A Text to Text Approach for COVID-19 Event Extraction on Social Media. In Proceedings of the 2020 EMNLP Workshop W-NUT: The 6th Workshop on Noisy User-generated Text, November 19, 2020.

Congcong Wang, Paul Nulty, and David Lillis. A Comparative Study on Word Embeddings in Deep Learning for Text Classification. In Proceedings of 4th International Conference on Natural Language Processing and Information Retrieval (NLPIR 2020), Seoul, Korea.

Congcong Wang, David Lillis. Classification for Crisis-Related Tweets Leveraging Word Embeddings and Data Augmentation. In Proceedings of the Twenty-Eighth Text REtrieval Conference (TREC 2019), Gaithersburg, MD, 2020.

Another conference paper was submitted and under review and one research project is under working.

ENGINEERING PROJECTS.

- **TTT**: A package for fine-tuning HuggingFace's Transformers with TPUs, written in Tensorflow2.0, Sep, 2020.
- Data-Explorer: A lightweight web application for data explanatory analysis August, 2020.
- Autocoder: a basic and simple tool for code auto completion (blog and source code releases), Jun, 2020.
- **Feeder-Bot**: a tool for automating updates of RSS feeds (e.g., arxiv) to users' receiver platforms (e.g., Twitter), Mar, 2020.
- MLP-TC: machine learning package for text classification. Dec, 2019.

MISC.

W-NUT EMNLP 2020 Reviewer.