# Renze Lou

Phone: (86) 177 6721 6840 Email: marionojump0722@gmail.com Personal Website

## **EDUCATION**

Zhejiang University City College (ZUCC), Hangzhou, China

Sept 2018-Jul 2022

Bachelor of Engineering in Software Engineering GPA: 3.88/4.0 Average Score: 90/100 Rank: 2/66

## SELECTED PUBLICATIONS

(\* indicates equal contribution)

- 1. Yutong Wang\*, **Renze Lou\***, Kai Zhang\*, Maoyan Chen and Yujiu Yang. MORE: A Metric Learning Based Framework for Open-Domain Relation Extraction. In ICASSP 2021.
  - Be responsible for the whole professional writing (as well as the rebuttal letter). Then, refine our article with the help of advisor and co-authors.
  - Lead all the experiments, complete most of the codes (algorithm, hyper-parameters, and baseline). After that, make it open source in my GitHub repository.
  - Participate in the collection of related works and discuss with co-authors to improve our methodology (with a better deep metric learning strategy to capture richer set-based signals).
- 2. Weicheng Ma\*, Kai Zhang\*, **Renze Lou**, Lili Wang and Soroush Vosoughi. Contributions of Transformer Attention Heads in Multi- and Cross-lingual Tasks. In ACL 2021 (**Long Oral**).
  - Participate in collecting massive NLP corpus (various linguistic resources needed in this work).
  - Handle some parts of our experiments. Observe any interesting or bizarre phenomenons during the experiment, thence discuss with co-authors to modify our algorithm.
- 3. Weicheng Ma\*, **Renze Lou\***, Kai Zhang, Lili Wang and Soroush Vosoughi. GradTS: A Gradient-Based Automatic Auxiliary Task Selection Method Based on Transformer Networks. In EMNLP 2021.
  - Lead all the experiments, complete most of our codes and the materials used in our paper (figures, charts, etc.). Investigate and reproduce the strong baseline, which isn't completely open source.
  - To improve the experimental setting, propose several intuitive control experiments according to the reviewer's critics (our work used to be rejected by TACL).
  - Participate in discussing the paper layout, think up a few suggestions to make it easier to follow.

## RESEARCH EXPERIENCE

Remote Research Intern. Minds, Machines and Society Group.

Advisor: Soroush Vosoughi, Google Scholar

Remote Research Intern. Intelligent Computing Laboratory.

Advisor: Yujiu Yang, Research Gate

Research Assistant. Institute of Artificial Intelligence.

Advisors: Lin Sun, Google Scholar and Minghui Wu, Google Scholar

Dartmouth College Oct 2020-Aug 2021 Tsinghua University

Jun 2020-Oct 2020

Zhejiang University City College

May 2020-Mar 2021

#### WORK EXPERIENCE

## Hangzhou Maixiang Health Technology Co., Ltd

Jun 2021 - Sept 2021

Zhejiang, China NLP Algorithm Intern

The Construction and Application of Traditional Chinese Medical Knowledge Graph:

- Communicate with doctors of traditional Chinese medicine, capture their needs.
- Investigate related works (publications, database, etc.) and employ python to crawl data on the internet (with the license).
- Utilize our algorithm (the one accepted by ICASSP 2021) to extract novel relation patterns in semi-structured clinical text. Then, make use of some NLP models to generate structured data.

## **PROJECTS**

1. Research on Open Relation Extraction in Medical Therapic Recording

National Innovation Training Program for College Students (202113021002)

Key Research and Development Project of Zhejiang Province (2021C01164)

2. Research on Named Entity Recognition in Social Media

National Innovation Training Program for College Students (202113021003)

Leader; May 2021- May 2022

15,000 RMB 10,000 RMB

Member; May 2021-May 2022

15,000 RMB

# **SERVICES**

External Reviewer: EMNLP 2021; JIFS.

**Leadership:** Co-Founder of CCAi (the first institution for Artificial Intelligence at ZUCC).

Teaching Asistance: Deep Learning Application Development; Object-oriented Programming.

## **SKILLS**

**Programming**: Python; LATEX; Java; C/C++; Matlab.

Tools: Pytorch; Transformers (huggingface); Keras; Scikit-learn.