# Zhihan Zhou

Add: 800 Hinman Avenue, Evanston, IL, USA 60202 Tel: (1) 224-420-0851

Email: zhihanzhou@u.northwestern.edu Personal Web: zhihan1996.github.io

#### **EDUCATION**

### Department of Computer Science, Northwestern University

09/2018 - Present

- ♦ Doctor of Philosophy, Computer Science (GPA: **4.0/4.0**)
- ♦ Master of Science, Computer Science (GPA: 4.0/4.0)

Advisor: Han Liu

## School of Mathematical Sciences, Zhejiang University

09/2014 - 06/2018

♦ Bachelor of Science, Mathematics and Applied Mathematics

## **PUBLICATIONS**

♦ Joint Speaker Diarization and Recognition Using Convolutional and Recurrent Neural Networks

Zhihan Zhou, Yichi Zhang, Zhiyao Duan

Proceedings of ICASSP 2018

**♦ ELLPMDA:** Ensemble learning and link prediction for miRNA-disease association prediction

Xing Chen\*, **Zhihan Zhou**\*, Yan Zhao (\*: joint first author)

Published on RNA Biology, pages 807-818, volume 15, 2018

DNABERT: Pre-trained Bidirectional Encoder Representation from Transformers for DNA Language Modeling in Genome

Yanrong Ji\*, **Zhihan Zhou**\*, Han Liu, Ramana V Davuluri (\*: joint first author)

Published on *Bioinformatics*, btab083, 2021

♦ Few-shot Slot Tagging with Collapsed Dependency Transfer and Label-enhanced Task-adaptive Projection Network

Yutai Hou, Wanxiang Che, Yongkui Lai, Zhihan Zhou, Yijia Liu, Han Liu, Ting Liu

Proceedings of ACL 2020

♦ Trade the Event: Corporate Events Detection for News-based Event-driven Trading

Zhihan Zhou, Liqian Ma, Han Liu

Proceedings of ACL 2021, Findings

### WORK EXPERIENCE

## Applied Scientist Intern @ AWS AI

09/2021 - Present

- ♦ Conduct research projects in Conversational AI.
- Perform large-scale conversational model pre-training and delicate fine-tune/inference strategy to improve fewshot conversation language understanding.

## Research Assistant @ MAGICS Lab, Northwestern University

01/2019 - Present

♦ Conducted multiple Research projects including but not limited to:

Massive News Acquisition: Build a system that acquires news articles in real-time from 10000+ websites.

**Drug Repurposing:** Exploit Graph Attention Network (GATs) to predict the relationships between drugs and diseases on a huge biologic knowledge graph which contains millions of nodes and tens of millions of edges.

Virus Genome Analysis: Utilize Longformer-based language model to analyze the SARS\_CoV\_2 virus.

♦ Participate in the construction and maintenance of a private Kubernetes cluster consists of 14 nodes.

## **COMPUTER SKILLS**

- ♦ Computer languages: Python, Java, R, Javascript, HTML, CSS, Matlab
- ♦ Skills: Kubernetes, Docker, Linux, MongoDB, React