ZEYU ZHAO

Google Scholar LinkedIn Personal Website

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EDUCATION

University of Edinburgh

September 2020 - Present

PhD Student, supervised by Prof Peter Bell

End-to-End Speech Recognition

Centre for Speech Technology Research

School of Informatics

Tsinghua University

September 2017 - August 2020

Master of Science, supervised by Dr Wei-Qiang Zhang

End-to-End Keyword Search and Speech Recognition for Low Resource Languages

Speech and Audio Technology Lab

Department of Electronic Engineering

Lady Margaret Hall, University of Oxford

August 2019

CGPA: 90/100

CGPA: 3.6/4.0

Summer Programme, Science Research at the Cutting Edge

Successfully completed with distinction

Beijing Institute of Technology

September 2013 - June 2017

Bachelor of Science

Department of Electronic Engineering

RESEARCH INTERESTS

Automatic Speech Recognition (ASR), End-to-End ASR

PUBLICATIONS

Conferences

- **Z. Zhao** and P. Bell, "Regarding Topology and Variant Frame Rates for Differentiable WFST-based End-to-End ASR" INTERSPEECH 2023 (accepted)
- Y. Li^{†1}, **Z. Zhao**[†], O. Klejch, P. Bell, and C. Lai, "A Word-Level Investigation of the Mutual Impact of Speech and Emotion Recognition" INTERSPEECH 2023 (accepted)
- **Z. Zhao** and P. Bell, "Investigating Sequence-Level Normalisation For CTC-Like End-to-End ASR" IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2022, pp. 7792-7796
- **Z. Zhao** and W. Q. Zhang, "End-to-End Keyword Search Based on Attention and Energy Scorer for Low Resource Languages" INTERSPEECH 2020 (pp. 2587-2591)
- **Z. Zhao**, W. Q. Zhang, J. Liu, F. Zhang, X. Li, and L. Yu, "Jujubecake: An Extension of LSTM Considering Correlation among Input Blocks" 2020 15th IEEE International Conference on Signal Processing (ICSP) (Vol. 1, pp. 316-320)

^{1†}Equal contribution.

Journals

- **Z. Zhao** and W. Q. Zhang, "End-to-End Keyword Search System Based on Attention Mechanism and Energy Scorer for Low Resource Languages" Neural Networks, 2021, 139, 326-334
- **Z. Zhao**, W. Q. Zhang, and J. Liu, "End-to-End Keyword Search System Based on Attention Mechanism and Multitask Learning," (in Chinese) Journal of Signal Processing, 2020, 36(6):839-851. DOI: 10.16798/j.issn. 10030530. Jun 2020.

EXPERIENCE

Automatic Speech Recognition (ASR) 2021-22

January 2022 - June 2022

By Prof Peter Bell

Teaching Assistant and Demonstrator

University of Edinburgh

Machine Learning 2022-23

September 2022 - January 2023

By Dr Hao Tang

Marker

University of Edinburgh

Automatic Speech Recognition (ASR) 2022-23

January 2023 - June 2023

By Prof Peter Bell

Teaching Assistant and Demonstrator

University of Edinburgh

AWARDS & SCHOLARSHIPS

Student Research Award

2019

Research Center for Media Big Data Cognitive Computing, Department of Electronic Engineering Tsinghua University, Beijing, China

National Scholarship

2014 - 2016

Beijing Institute of Technology, Beijing, China

For top students only

First Undergraduate Scholarship

2013 - 2017

Beijing Institute of Technology, Beijing, China

For top students only

Third Prize, Beijing Electronic Design Competition

2016

Honorable Mentioned, Mathematical Contest in Modelling

2015

First Prize in National Physics Competition

2014