ANNA MIN

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EDUCATION

Bachelor of Engineering in Software Engineering, Tsinghua University

09.2020 - 06.2024(Expected)

Major GPA: 3.73

sophomore: 3.78, junior: 3.86

Relevant Courses: Probability and Statistics, AI, ML, Complex Analysis(100), Data Structure(97), Advanced Algebra, Formal Verification, Discrete Mathematics, Computer Networks, OS, Compilers, Computer Organization, Digital Electronics(97), Web Development(98), Databases, Formal Languages and Automata, Computer Graphics

PUBLICATIONS

- [1] **Anna Min**, Chenxu Hu, Yi Ren, Xiang Yin, Hang Zhao. When End-to-End is Overkill: Rethinking Cascaded Speech-to-Text Translation (in submission to COLING2024, under review) [Paper]
- [2] **Anna Min**, Chenxu Hu, Yi Ren, Hang Zhao. Fine-grained Emotion Transfer for Speech-to-Speech Translation in Expressive Video Dubbing (in submission to NAACL2024, under review) [Paper]

RESEARCH EXPERIENCE

Crafting Precision in the Wild: Learning Spatial Sound Localization from Unlabelled Egocentric Videos

Anna Min, Ziyang Chen, Hang Zhao, Andrew Owens

July-2023

Advisor: Prof. Andrew Owens, University of Michigan

- Explore weak labels based on the direction of source motion for accurate binaural sound localization prediction
- Introduced the first stereo dataset and benchmark for sound localization in the wild

When End-to-End is Overkill: Rethinking Cascaded Speech-to-Text Translation (submit to COLING2024)

Anna Min, Chenxu Hu, Yi Ren, Xiang Yin, Hang Zhao

March - 2023

Advisor: Prof. Hang Zhao, Tsinghua University

- Explore the advantages of integrating multiple ASR candidates and self-supervised speech features into MT
- Propose a method that leverages two distinct pretrained autoregressive models to enhance a cascaded system, addressing the challenges associated with error divergence

Enhanced Speech-to-speech Translation for Expressive Video Dubbing (submit to NAACL2024)

Anna Min, Chenxu Hu, Yi Ren, Xiang Yin, Hang Zhao

Nov 2022 - 2023

Advisor: Prof. Hang Zhao, Tsinghua University

- Construct a newly constructed dataset with aligned bilingual audio tracks
- Use way to unit translation and unit to way HiFi-GAN-based networks for transferring pitches and rhythms

SELECTED PROJECTS

Mini Database [Code]

Feb - May 2023

• Wrote a database that supports basic SQL queries with optimization, transactions, locks, and recovery

Android Chat App [Code]

Feb - May 2023

• Wrote an Android app and Django server which support user searching, following, and chatting

FTP Server & Client Sep 2022 - Jan 2023

• Wrote an FTP server in C and FTP client UI in Python supporting most basic commands

Mars Online Judge platform [Code] [Website] [Press]

Sep 2022 - Jan 2023

A web-based project for MarsOJ organization's students to provide online supplementary training

- The platform offers real-time answer battle and review of wrong answers as the main features to consolidate and improve offline educational content, teachers can also track students' learning progress through the platform
- Mainly responsible for the back-end, participate in the front-end, using flask, Kubernetes, celery, vue, javascript and other technology stacks
- This platform has over 3000 users and 1000 paid users

Machine Learning Modeling Services [Code]

Jul 2022 - Aug 2022

One-stop solution based on providing model deployment online

- Adapt to onnx, pmml, keras multiple machine learning models, out of the box, load balancing, complete testing
- Mainly responsible for the back-end, participate in the front-end, familiar with django, docker, Kubernetes, celery, vue, javascript and other technology stacks

HONORS AND COMPETITIONS

Academic Excellence Award, Tsinghua(Awarded to undergraduates with academic achievements, top 3%)	2023
Science and Technology Innovation Award(To undergraduates with excellent research potentials, top 3%)	2023
Spark Scientific Innovation Fellowship(50/3500 Tsinghua undergraduates for outstanding research performance)	2022
Science and Technology Innovation Award(To undergraduates with excellent research potentials, top 3%)	2022
the first prize of 2021 National Student Mathematical Modeling Competition in Beijing Group(89/3000)	2021

SKILLS

Programming: Python, C, C++, MATLAB, Rust, Java, Javascript, LaTeX, Verilog, SQL

Framework: Pytorch, Fairseq, Detectron, MMDetection, COLMAP

Languages: Chinese (Native), English (TOEFL 106 (R30+L27+W26+S23))