Hao Sun

Objective: AI and Multimodal Research, Algorithm Development, and Engineering
+86-17863107076 | sunhaoxx@zju.edu.cn

EDUACATION & SKILLS

Zhejiang University **Ph.D** in Computer Science and Technology **2020.09 – 2025.06**

Specialization in Multimodal AI and Large Language Models.
Proficient in TensorFlow and PyTorch, with extensive experience in AI model training or tuning projects.
Gained strong international collaboration skills during a year-long research exchange(2023-2024) in Japan.

Harbin Institute of Technology **Bachelor** of Software Engineering **2016.09 – 2020.06**

Proficient in software engineering principles, design patterns, and scalable system architecture.
Skilled in C/C++, Java, and Python, with experience in code optimization across diverse projects.
Excellent English (CET-6: 620), fluent in technical writing and international collaboration.

MAIN PAPERS

1. **Sun H**, Wang H, Liu J, et al. CubeMLP: An MLP-based Model for Multimodal Sentiment Analysis and Depression Estimation[C]. ACM Multimedia. 2022.
2. **Sun H**, Liu J, Chen Y W, et al. Modality-Invariant Temporal Representation Learning for Multimodal Sentiment Classification[J]. Information Fusion, 2023. IF: 18.1.
3. **Sun H**, Chen Y W, Lin L. TensorFormer: A Tensor-Based Multimodal Transformer for Multimodal Sentiment Analysis and Depression Detection[J]. IEEE Transactions on Affective Computing, 2022. IF: 14.7
4. **Sun H**, Niu Z, Wang H, et al. Multimodal Sentiment Analysis with Mutual Information-based Disentangled Representation Learning[J]. IEEE Transactions on Affective Computing, 2025, Early Access. IF: 14.7
5. **Sun H**, Liu J, Chai S, et al. Multi-Modal Adaptive Fusion Transformer Network for The Estimation of Depression Level[J]. Sensors, 2021.
6. **Sun H**, Song Y, Liu J, et al. One Framework to Rule Them All: Unifying Multimodal Tasks with LLM Neural-Tuning, ArXiv. 2408.03001, 2024.
7. **Sun H**, Song Y, Liu J, et al. Multimodal Infusion Tuning for Large Models, ArXiv. 2403.05060, 2024.
8. Niu Z, **Sun H**, Shuyi O, et al. IRLSG: Invariant Representation Learning for Single-Domain Generalization in Medical Image Segmentation[C]. IEEE ICASSP. 2024.
9. Hu J, Li Y, **Sun H**, et al. LGA: A Language Guide Adapter for Advancing the SAM Model' s Capabilities in Medical Image Segmentation[C]. MICCAI. 2024.
10. Niu Z, Wang H, **Sun H**, et al. MCKD: Mutually Collaborative Knowledge Distillation for Federated Domain Adaptation And Generalization[C]. ICASSP 2023.
11. Qiu Z, Liu J, **Sun H**, et al. CoSTHR: A Heart Rate Estimating Network with Adaptive Color Space Transformation[J]. IEEE Transactions on Instrumentation and Measurement, 2022.
12. Teng S, Liu J, **Sun H**, et al. Enhanced Multimodal Depression Detection with Emotion Prompts[C]. ICASSP 2025.

With 10 more papers under review.

PATENTS

1. Engineering Progress Determining Method and Device Based on Multi-Mode Time Sequence Information Fusion. App. No: CN202310788030.2/US20250005475A1. Country: CN/US. Publication Date: 2023-07. Third Inventor.
2. Rheumatoid Arthritis Activity Grading Device Based on Multimodal Data. App. No:CN202310755346.1. Country: CN. Publication Date: 2023-06. Fourth Inventor.
3. A Single-Domain Generalization Method for Medical Image Segmentation. App. No: CN116596832A. Country: CN. Publication Date: 2023-02. Fifth Inventor.

HONORS

1. 2025: **Outstanding Graduate Award** of Zhejiang University.
2. 2024/2023/2022/2021: Award of Honor for Graduate (**Four times**), ZJU Academic Scholarship.
3. 2024/2023: Outstanding Graduate Leader Award (**Twice**), Graduate with Merit A Performance, HUAWEI Scholarship.
4. 2020: **Outstanding Graduate Award** of Harbin Institute of Technology.
5. 2016-2018: National Inspirational Scholarship, Second-Class Scholarship, and Excellence in Studies Scholarship.
6. 2018-2020**:** Outstanding English Scholarship, Second-Class Scholarship, and Outstanding Student Award.

EXPERIENCE & PROJECTS

1. 2023-2024: Received the ZJU Academic Award for Outstanding Doctoral Candidates, funded for research exchange in Japan under the supervision of a Fellow of the Engineering Academy of Japan.
2. 2020: Responsible for authoring the complete TensorFlow Wiki of IMOOC.
3. 2022-2025: Core participant in the National Key R&D Program Project, Ministry of Science and Technology, 2022YFC2504605, "Intelligent Integrated Analysis Platform Construction for Rheumatoid Arthritis".
4. 2022-2024: Core participant in the Zhejiang Provincial Natural Science Foundation Key Project, LZ22F020012, "Preoperative Early Recurrence Detection and Prediction of HCC Based on Federated Learning".
5. 2022-2024: Participant in enterprise collaboration project with Hangzhou New Zhongda Technology Co., Ltd., 2022AIZD0147-02, "Research on Key Technologies for Smart Construction Site Management Platform Based on Computer Vision".

For more independent projects, please refer to https://github.com/kiva12138

HOBBIES & SELF-INTRODUCTION

1. I am a Ph.D. specializing in AI, focusing on multimodal learning and fine-tuning large models for complex scenarios. My work, spanning dialogue analysis, depression detection, and real-world applications, has resulted in 10+ publications in top journals and patents.
2. Proficient in TensorFlow and PyTorch, I have published TensorFlow tutorials on IMOOC. I have also conducted interdisciplinary projects and a year-long research exchange in Japan, gaining international experience and teamwork skills.
3. Passionate about advancing multimodal AI applications, I aim to drive innovation and real-world impact. In my free time, I enjoy photography and fitness.