Junhao Cheng

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EDUCATION

Sun Yat-sen University(SYSU)   **09/2021-07/2025**

B.E. in Intelligent Science and Technology

- **GPA: 3.8/4.0**, with 2nd place SYSU Outstanding Student Scholarship
- **Language&Skills:** TOEFL 99(Speak 24); Python, Pytorch, Linux, Matlab, C, C++, SQL
- **Research Interest:** Generative Models, LLM/MLLM, Interactive AI

ACADEMIC PAPERS

- **Cheng J**, Lu X, Li H, et al. AutoStudio: Crafting Consistent Subjects in Multi-turn Interactive Image Generation. *(Under Review)*
- Cao Q, **Cheng J**, Liang X, Lin L, VisDiaHalBench: A Visual Dialogue Benchmark For Diagnosing Hallucination in Large vision-Language Models. *(ACL 2024)*
- **Cheng J**, Yin B, Cai K, et al. TheaterGen: Character Management with LLM for Consistent Multi-turn Image Generation[J]. arXiv preprint arXiv:2404.18919, 2024. *(Under Review)*
- **Cheng J**, Jin Z, Luo X. Integrating Domain Knowledge into Transformer for Short-Term Wind Power Forecasting. *(Under Review)*
- Yang H, Ouyang J, **Cheng J**, et al. MRF-Former: A Multi-scale Resolution Fusion Approach for Addressing Scale Discrepancies in Remote Sensing Image Change Detection. *(Under Review)*

RESEARCH EXPERIENCES

HCPLab(SYSU), research intern   **03/2023-present**

- Guided by **Prof. Xiaodan Liang**.
- Conducted research on generative models and multimodal large language models for multi-turn interactions.
- Published two papers as the first author (under review at ECCV/NeurIPS 2024) and contributed as the second author to one paper (accepted at ACL 2024).

VLLab(UCMerced), remote intern   **05/2024-present**

- Guided by **Prof. Ming-Hsuan Yang**.
- Conducting research on diffusion models for image deblurring with unpaired training data.
- Preparing a paper as the first author for submission.

PROFESSIONAL EXPERIENCES

Tencent(Hunyuan Team), applied research intern   **07/2024-present**

- Planning to conduct research on multi-turn interactive image generation using the HunyuanDiT model.

Lenovo Research, research collaborator   **09/2023-06/2024**

- Led the interactive image generation project, conducted research on maintaining consistency within a dialogue.
- Proposed TheaterGen, CMIGBench and AutoStudio(190+ stars at github) for multi-turn image generation.

Pengcheng Laboratory, research collaborator   **08/2023-02/2024**

- Collaborated with Prof. Xing Luo on the DKFormer model for wind power forecasting(submitted to ENERGY).

Chinese Institute for Brain Research(CIBR), research assistant   **03/2023-08/2023**

- Engaged in the development of non-invasive brain-computer interface decoding algorithm.
- Co-developed a magnetoencephalography(MEG) decoding method based on MAE and diffusion models.

COMPETITIONS

Honorable Prize, 2023 Mathematical Contest In Modeling(MCM), Team Leader

2nd Prize, 2023 China University Computer Competition-Team Program ladder Competition, Team Member

2nd Prize, 2022 National Statistical Modeling Competition for College Students, Team Leader

3rd Prize, 2022 Contemporary Undergraduate Mathematical Contest in Modeling, Team Leader