

Guian Fang

GENERATIVE AI · AI ALIGNMENT

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“Think Twice, Code Once.”

Education

NUS(National University of Singapore)

PHD IN ELECTRICAL AND COMPUTER ENGINEERING

- Supervisor: **Mike Zheng Shou** (Show Lab)

Singapore

Aug. 2024 - Current

SYSU(Sun Yat-sen University)

B.E. IN INTELLIGENT SCIENCE AND TECHNOLOGY

- Supervisor: **Xiaodan Liang** (HCP-I2 Lab SYSU)

Shenzhen, China

Sept. 2020 - Jul. 2024

Skills

Frameworks	PyTorch, TensorFlow, Keras, scikit-learn, Mindspore, PaddlePaddle
Programming	Python, C/C++, Matlab, LaTeX, Web (HTML, CSS, JavaScript)
Languages	Chinese (Mandarin, mother tongue), English (IELTS 6.5)
DevTool	Git (version control system), Linux (operating system), Docker (containerization tool), Spack (package management tool), Slurm (cluster management and job scheduling system)

Experience

Text to 3D World & Autonomous Agents and Multiagent Systems

RESEARCH SCIENTIST

Remote internship, mostly works on 3D computer vision and Large language model.

Tau Lab | Cybever

Sept. 2023 - Jul. 2024

Evaluation of text-to-video generation.

PRIMARY AUTHOR

- Towards A Better Metric for Text-to-Video Generation(**under AACL review**)

NUS | SHOW LAB

Jun. 2023 - Nov. 2023

Multimodal LLM & Prompt engineering.

MAIN PARTICIPANT

- ChartThinker: A Contextual Chain-of-Thought Approach to Optimized Chart Summarization(**COLING accepted**)

Alibaba | DAMO Academy

Aug. 2023 - Nov. 2023

Fine-tuning large language models & Controllable image generation.

MAIN PARTICIPANT

- LLaMA-Adapter(5.7k stars)**, **LLaMA2-Accessory(2.7k stars)**
- Improving Compositional Text-to-image Generation with Large Vision-Language Models
- FocusDiff: Foreground Self-Decoupling Customization for Text-to-Image Generation

Shanghai AI Laboratory

Jul. 2023 - Nov. 2023

Enhancing Generative AI Models for 2D or 3D Using RLHF.

PRIMARY AUTHOR

- RealignDiff: Boosting Text-to-Image Diffusion Model with Coarse-to-fine Semantic Re-alignment(**under TPAMI review**)
- HumanRefiner: Benchmarking Abnormal Human Generation and Refining with Coarse-to-fine Pose-Reversible Guidance(**ECCV accepted**)

HUAWEI | NOAH'S ARK LAB

Mar. 2023 - Nov. 2023

National Undergraduate Innovation and Entrepreneurship Training Program.

PRINCIPAL INVESTIGATOR

- Online Evidence Enhanced and Fine-Grained Fake News Detection in Long Text During the COVID-19 Pandemic.(**under NCAA submission**)
- Alzheimer's disease diagnosis based on multimodal data including images, voiceprints, poses and biomarkers.(**under Lancet submission**)
- IEEE UV 2022 Paper Publication: Wise in Vaccine Allocation

Sun Yat-sen University

Jun. 2021 - Mar. 2023

Honors & Awards

COMPETITION

2021	1st Place , "Smart Campus" Hackathon competition	<i>Guangzhou, China</i>
2021	3rd Place , National College Students Mathematical Modeling Competition (Huashu Cup)	<i>Tianjin, China</i>
2022	Silver Prize , Intelligent Algorithm Competition of the Game Cup	<i>Shenzhen, China</i>
2022	3rd Place , 3rd National College Computer Ability Challenge	<i>Shenzhen, China</i>
2022	2nd Place , Asia and Pacific Mathematical Contest in Modeling	<i>Beijing, China</i>
2022	Silver Medal , China Collegiate Algorithm Design & Programming Challenge Contest	<i>Shanghai, China</i>
2022	2nd Place , The 2022 Social Computing Innovation Competition	<i>Hangzhou, China</i>
2023	1st Place , 4th National College Computer Ability Challenge	<i>Shenzhen, China</i>

SCHOLARSHIP

2021	Recipient , Ethic Award scholarship	<i>Shenzhen, China</i>
2022	Recipient , Huawei Intelligent Foundation Scholarship	<i>Shenzhen, China</i>
2022	Recipient , National Encouragement scholarship	<i>Shenzhen, China</i>
2023	1st Place , SYSU Outstanding Student Scholarship (Top 5%)	<i>Shenzhen, China</i>
2023	1st Place , National Scholarship (Rank 1st)	<i>Shenzhen, China</i>
2023	1st Place , Li Xuerou Foundation Scholarship (Among the top 10 students in the college)	<i>Shenzhen, China</i>

Publication

- **Guian Fang**, Wenbiao Yan, Yuanfan Guo, Jianhua Han, Zutao Jiang, Hang Xu, Shengcai Liao, & Xiaodan Liang. (2024). HumanRefiner: Benchmarking Abnormal Human Generation and Refining with Coarse-to-fine Pose-Reversible Guidance. In European conference on computer vision. Cham: Springer Nature Switzerland, 2024
- Mengsha Liu, Daoyuan Chen, Yaliang Li, **Guian Fang**, & Ying Shen. (2024). ChartThinker: A Contextual Chain-of-Thought Approach to Optimized Chart Summarization. In Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024) (pp. 3057-3074).
- Baiqiao Yin, Jiaqing Yuan, Weichen Lv, Jiehui Huang, & **Guian Fang**. (2023). Wise in Vaccine Allocation. In 2022 6th International Conference on Universal Village (UV) (pp. 1-6).

Preprints

- Jay Zhangjie Wu, **Guian Fang**, Haoning Wu, Xintao Wang, Yixiao Ge, Xiaodong Cun, David Junhao Zhang, Jia-Wei Liu, Yuchao Gu, Rui Zhao, Weisi Lin, Wynne Hsu, Ying Shan, & Mike Zheng Shou. (2024). Towards A Better Metric for Text-to-Video Generation.
- Song Wen, **Guian Fang**, Renrui Zhang, Peng Gao, Hao Dong, & Dimitris Metaxas. (2023). Improving Compositional Text-to-image Generation with Large Vision-Language Models.
- **Guian Fang**, Zutao Jiang, Jianhua Han, Guansong Lu, Hang Xu, Shengcai Liao, & Xiaodan Liang. (2023). Re-alignDiff: Boosting Text-to-Image Diffusion Model with Coarse-to-fine Semantic Re-alignment.
- **Guian Fang**, Mengsha Liu, Yi Zhong, Zhuolin Zhang, Jiehui Huang, Zhenchao Tang, & Calvin Yu-Chian Chen. (2023). Multimodal Identification of Alzheimer's Disease: A Review.
- Xudong Lu, Renrui Zhang, **Guian Fang**, Fu-Yun Wang, Zhaoyang Huang, Aojun Zhou, Peng Gao, & Hongsheng Li. (2024). FocusDiff: Foreground Self-Decoupling Customization for Text-to-Image Generation.
- Ziyang Ma, Mengsha Liu, **Guian Fang**, & Ying Shen. (2023). LTCR: Long-Text Chinese Rumor Detection Dataset.