Fanqing Meng

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Research interests: *Multimodel Learning, Transfer Learning, Foundation Model*

EDUCATION BACKGROUND

Shanghai Jiaotong University   *2023 - 2028 (Expected)*
PhD Student
Advisor: Ping Luo

Tongji University   *2019 - 2023*
Bachelor of Software Engineering
GPA:4.82/5 Rank:7/212:

RESEARCH EXPERIENCES

[1]: Foundation Model is Efficient Multimodal Multitask Model Selector (**NIPS 2023**) by **Fanqing Meng**, Wenqi Shao, Zhanglin Peng, Chonghe Jiang, Kaipeng Zhang, Yu Qiao, Ping Luo

- We introduce an efficient multi-task model selector (EMMS), which transforms different label formats of various downstream tasks into a unified noisy label embedding to evaluate a model's transferability. EMMS proves to be fast, effective, and versatile, establishing itself as the first model selection method in a multi-task scenario.

[2]: ChartAssisstant: A Universal Chart Multimodal Language Model via Chart-to-Table Pre-training and Multitask Instruction Tuning (**ACL2024 100+ stars**) by **Fanqing Meng**, Wenqi Shao, Quanfeng Lu, Peng Gao, Kaipeng Zhang, Yu Qiao, Ping Luo

- ChartAssistant: an advanced chart-based vision-language model that excels in comprehending and reasoning with diverse chart types with two-stage training strategy, surpassing state-of-the-art methods and achieving impressive performance on real-world chart data.

[3]: MMT-Bench: A Multimodal MultiTask Benchmark for Comprehensive Evaluation of Large Vision-Language Models (**ICML2024 cite by Qwen-VL2**) by Kaining Ying*, **Fanqing Meng***, Jing Wang*, ... , Ping Luo , Wenqi Shao

- MMT-Bench is a comprehensive benchmark designed to rigorously evaluate Large Vision-Language Models (LVLMs) across diverse, expert-level multimodal tasks, enhancing the development of multimodal intelligence.

[4]: An Efficient Transformer for Demosaicing via Compressed Multi-branch Attention Mechanism (**ICASSP 2024**) by Xun Wu*, **Fanqing Meng***, Yaqi Wu, Jiawei Zhang, Feng Zhang

- Proposed ECMT is an efficient and effective demosaicing approach that addresses the limitations of existing methods. It efficiently captures long-range spatial dependencies and reduces computational costs through innovative components. which have great results and lower computational requirements.

[5]: CAU: A Causality Attention Unit for Spatial-temporal Sequence Forecast (**TMM**) by Bo Qin, **Fanqing Meng**, Xianghui Fang, Guokun Dai, Shijin Yuan, Bin Mu

[6]: MMIU: Multimodal Multi-image Understanding for Evaluating Large Vision-Language Models (preprint) by **Fanqing Meng**, Jin Wang, Chuanhao Li, xxx, Ping Luo, Kaipeng Zhang, Wenqi Shao

[7]: Lvlm-ehub: A comprehensive evaluation benchmark for large vision-language models (preprint 400+ stars) by Peng Xu, Wenqi Shao, Kaipeng Zhang, Peng Gao, Shuo Liu, Meng Lei, **Fanqing Meng**, Siyuan Huang, Yu Qiao, Ping Luo

AWARD

Tongji University First Class Scholarship (top 5%)   *2020,2021,2022*
2nd Mobile Intelligent Photography and Imaging WorkShop   *2023*

RESEARCH EXPERIENCES

SenseTime   *July 2022 - Dec 2022*
Research Intern (low level vision)   Shanghai
Advisor: Dr. Jiawei Zhang

Shanghai AI Lab   *Jan 2023 -*
Research Intern (foundation model)   Shanghai
Advisor: Dr. Wenqi Shao

SERVICES

Reviewer of CVPR2024, ECCV2024