Xiaoqian Shen

☑ Email: xiaoqian.shen@kaust.edu.sa

Webpage: xiaoqian-shen.github.io

Google Scholar Github

Research Interest

♦ **Generative Models:** Image / Video / Sequence Generation

♦ **Vision-Language:** Multi-modal Comprehension / Generation

Education

King Abdullah University of Science and Technology, Saudi Arabia.
Ph.D. Computer Science, supervised by Prof. Mohamed Elhoseiny.

Jan. 2024 – present

King Abdullah University of Science and Technology, Saudi Arabia.

Aug. 2022 - Dec. 2023

M.Sc. Computer Science. GPA: 3.75/4.0 (M.S./Ph.D. program)

Thesis title: Efficient Learning Algorithms for Temporally Consistent Video Synthesis

Jilin University, China.

Aug. 2018 – Jun. 2022

B.S. Computer Science. GPA: 3.77/4.0

Experience

♦ **Research Scientist Intern**, Meta.

May. 2024 - Sep. 2024, United States

Dr. Yunyang Xiong, XR Core AI, Burlingame Multimodal foundation model optimization

♦ **Visiting research student**, KAUST.

Dec. 2021 - Mar. 2022, Saudi Arabia

Prof. Mohamed Elhoseiny's group

Leverage hierarchical constructive learning for large-scale zero-shot classification

♦ **Research assistant**, Tsinghua University.

Sep. 2020 - Mar. 2021, China

Prof. Yongfeng Huang's group

Medical Relation Extraction for Chinese Medicine Instructions

♦ **Research assistant**, HEBUT & University of Oxford.

May. 2020 - Sep. 2020, Remote

Prof. Zhenghua Xu's group

Utilize multimodality information of medical images for downstream tumor segmentation

Publications

- 1 K. Haydarov, A. Muhamed, **Xiaoqian Shen**, *et al.*, "Adversarial text to continous image generation," [CVPR 2024].
- 2 D. Zhu*, J. Chen*, **Xiaoqian Shen**, X. Li, and M. Elhoseiny, "Minigpt-4: Enhancing vision-language understanding with advanced large language models," **[ICLR 2024]**.
- 3 Xiaoqian Shen and M. Elhoseiny, "Storygpt-v: Large language models as consistent story visualizers," arXiv, 2023.
- 4 J. Chen, D. Zhu, **Xiaoqian Shen**, *et al.*, "Minigpt-v2: Large language model as a unified interface for vision-language multi-task learning," *arXiv*, 2023.
- [5] K. Haydarov, **Xiaoqian Shen**, A. Madasu, *et al.*, "Affective visual dialog: A large-scale benchmark for emotional reasoning based on visually grounded conversations," *arXiv*, 2023.

- 6 E. M. Bakr, **Xiaoqian Shen***, P. Sun*, F. F. Khan*, L. E. Li, and M. Elhoseiny, "Hrs-bench: Holistic, reliable and scalable benchmark for text-to-image models," *Proceedings of the IEEE/CVF International Conference on Computer Vision*, pp. 20 041–20 053, 2023, [ICCV 2023].
- **Xiaoqian Shen**, X. Li, and M. Elhoseiny, "Mostgan-v: Video generation with temporal motion styles," *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition*, pp. 5652–5661, 2023, [CVPR 2023].
- D. Zhu, J. Chen, K. Haydarov, Xiaoqian Shen, W. Zhang, and M. Elhoseiny, "Chatgpt asks, blip-2 answers: Automatic questioning towards enriched visual descriptions," [TMLR].
- J. Zhang, S. Zhang, Xiaoqian Shen, T. Lukasiewicz, and Z. Xu, "Multi-condos: Multimodal contrastive domain sharing generative adversarial networks for self-supervised medical image segmentation," *IEEE Transactions on Medical Imaging*, 2023.
- K. Yi, Xiaoqian Shen, Y. Gou, and M. Elhoseiny, "Exploring hierarchical graph representation for large-scale zero-shot image classification," European Conference on Computer Vision, pp. 116–132, 2022, [ECCV 2022].
- T. Qi, S. Qiu, **Xiaoqian Shen**, *et al.*, "Kemre: Knowledge-enhanced medical relation extraction for chinese medicine instructions," *Journal of Biomedical Informatics*, vol. 120, p. 103 834, 2021.

Academic Services

- ⋄ Conference reviewer, CVPR, ECCV
- ♦ Journal reviewer, IJCV, CVIU

Skills

- ♦ Languages: Chinese, English (TOEFL 104/120, GRE 328/340).
- ♦ **Coding**: Python, C/C++, Java, HTML5, LaTeX.
- ♦ **Software**: Photoshop, Final Cut Pro.

Awards

KAUST Graduate Scholarship.

2022 - present

Outstanding Undergraduate Thesis Award.

2022

Academic Scholarship.

2019 - 2021