

Mingze Yuan

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150 Western Ave, Allston, MA

EDUCATION

- **Harvard University** Boston, MA, United States
Ph.D. in Computer Science (Advisor: Prof. Na Li and Prof. Quanzheng Li) Sep 2024 - present
- **Peking University, Center for Data Science** Beijing, China
M.S. in Data Science (Advisor: Prof. Bin Dong) Sep 2021 - Jul 2024
- **Peking University, School of Mathematical Sciences** Beijing, China
B.S. in Statistics; Double degree in Economics Sep 2017 - Jul 2021

INDUSTRY EXPERIENCE

- **Medical AI R&D, Alibaba DAMO Academy** Beijing, China
Research Intern Jun 2022 - Jun 2024

RESEARCH INTERESTS

My research interests lie in AI for healthcare and generative modeling, particularly applying image segmentation, diffusion models, and LLMs to advance healthcare practices.

SELECTED PUBLICATIONS

- **Mingze Yuan**, Yingda Xia, Hexin Dong, Zifan Chen, Jiawen Yao, Mingyan Qiu, Ke Yan, Xiaoli Yin, Yu Shi, Xin Chen, Zaiyi Liu, Bin Dong, Jingren Zhou, Le Lu, Ling Zhang, Li Zhang. *Devil is in the Queries: Advancing Mask Transformers for Real-world Medical Image Segmentation and Out-of-Distribution Localization*. The IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**), 2023 **Highlight** (Top 2.5%).
- **Mingze Yuan**, Yingda Xia, Xin Chen, Jiawen Yao, Junli Wang, Mingyan Qiu, Hexin Dong, Jingren Zhou, Bin Dong, Le Lu, Li Zhang, Zaiyi Liu, Ling Zhang, *Cluster-Induced Mask Transformers for Effective Opportunistic Gastric Cancer Screening on Non-contrast CT Scans*. International Conference on Medical Image Computing and Computer-Assisted Intervention (**MICCAI**), 2023.
- Yutong Xie, **Mingze Yuan**, Bin Dong, Quanzheng Li. *Unsupervised Image Denoising with Score Function*. Thirty-seventh Conference on Neural Information Processing Systems (**NeurIPS**), 2023.
- **Mingze Yuan**, Peng Bao, Jiajia Yuan, Yunhao Shen, Zifan Chen, Yi Xie, Jie Zhao, Quanzheng Li, Yang Chen, Li Zhang, Lin Shen, Bin Dong. *Large language models illuminate a progressive pathway to artificial intelligent healthcare assistant*. Medicine Plus, 2024.
- Jiajia Yuan*, Peng Bao*, Zifan Chen*, **Mingze Yuan***, Jie Zhao, Jiahua Pan, Yi Xie, Yanshuo Cao, Yakun Wang, Zhenghang Wang, Zhihao Lu, Xiaotian Zhang, Jian Li, Lei Ma, Yang Chen, Li Zhang, Lin Shen, Bin Dong. *Advanced prompting as a catalyst: Empowering large language models in the management of gastrointestinal cancers*. The Innovation Medicine, 2023.
(*: these authors contributed equally)

ACADEMIC SERVICE

- Journal reviewer: IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
- Conference reviewer: ICML 2023

SELECTED HONORS AND AWARDS

- **Gold Medal**, the 32nd China Mathematics Olympiad (CMO), 2016
- **National Scholarship**, Peking University, 2023
- Challenge Winner Award (**Champion**), CrossMoDA, MICCAI 2022

SKILLS SUMMARY

- **Programming Languages**: Python, C/C++, Matlab, R
- **Languages**: English (TOEFL: 104, R30, L27, S21, W26), Mandarin