XIAO SONG

Address: Suzhou, P.R.China
Email: x.song.matt@gmail.com
Telephone: +86 18810779353
Homepage: https://mattxsong.github.io/

INTEREST

Computer Vision, Natural Language Processing, Causality, and Biomedicine.

EDUCATIONS

Nanjing University   **Sep 2024 - present**
Doctor of Philosophy, Computer Science and Technology
Advised by: Prof. Caifeng Shan (main advisor) & Assi. Prof. Chaoyou Fu

Beijing University of Technology   **Sep 2020 - Jun 2023**
Master of Philosophy, Computer Science and Technology
Advised by: Assoc. Prof. Xiaodan Zhang (main advisor)) & Prof. Junzhong Ji

University of Jinan   **Sep 2016 - Jun 2020**
Bachelor of Engineering, Computer Science and Technology
Advised by: Assoc. Prof. Lixin Du

WORK EXPERIENCE

Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences   **Jul 2023 - Jul 2024**
Full-time Research Assistant, Shenzhen
PI: Assoc. Prof. Ruxin Wang

The University of Hong Kong   **Aug 2022 - Oct 2022**
Research Internship, Remote
Advised by: Assi. Prof. Liangqiong Qu

HONORS & REWARDS

1. Graduate Science and Technology Innovation Award (Excellent Award), Beijing University of Technology, 2024.
2. Excellent Master's Thesis (3 A grades given by anonymous reviewers), Beijing University of Technology, 2023.
3. Outstanding Graduates, Beijing University of Technology, 2023.
4. Graduate Science and Technology Innovation Award (First Prize), Beijing University of Technology, 2023.
5. Academic Excellence Scholarship (Second-Class, Top 10%), Beijing University of Technology, 2020-2021.
6. Outstanding Graduates, University of Jinan, 2020.
7. Mathematics Competition of Chinese College Students (First Prize), Chinese Mathematical Society, 2019.

PUBLICATIONS

1. **Rethinking Radiology Report Generation via Causal Inspired Counterfactual Augmentation**.
   Xiao Song, Jiafan Liu, Yun Li, Yan Liu, Wenbin Lei, Ruxin Wang.
   The 15th ACM BCB, 2024, Oral.

2. **Multi-scale Superpixel based Hierarchical Attention Model for Brain CT Classification**.
   Xiao Song, Xiaodan Zhang, Junzhong Ji, Ying Liu.
   J. Vis. Commun. Image R. (JVCIR), 2023.

3. **Cross-modal Contrastive Attention Model for Medical Report Generation**.
   <u>Xiao Song</u>, Xiaodan Zhang, Junzhong Ji, Ying Liu, Pengxu Wei.
   The 29th COLING, 2022, Oral. (a top NLP conference)

4. **Multi-scale Superpixel based Fusion Network for Brain CT Classification**.
   Junzhong Ji, Menglong Zhang, <u>Xiao Song</u>, Xiaodan Zhang.
   China Sciencepaper, 2022.

PATENTS

1. <u>宋晓(Xiao Song)</u>, 王如心. 基于反事实数据增强的放射学报告生成方法. CN202311704996.X
2. 张晓丹, <u>宋晓(Xiao Song)</u>, 冀俊忠. 一种基于跨模态对比注意力机制的医学报告自动生成方法.
   CN202210563429.6

ACADEMIC PROJECTS

1. **Optimization Modeling and Causal Methods for Multimodal Medical Imaging Analysis**. 2025-2028.
   Funded by: National Natural Science Foundation of China.   <u>Role: Participation</u>
2. **Study of Large Atmospheric Science Model for Wildfire Dynamic Process**. 2025.
   Funded by: Nanjing University.   <u>Role: Participation</u>

SKILLS

Programing: Python (mainly used), C, C++, Java, C#, SQL, PHP, HTML.
Deep Learning Frameworks: Pytorch.