YINING JIAO

Chapel Hill, NC, USA

https://jiaoyining.github.io/ Yining Jiao jiaoyining jyn@cs.unc.edu 919-338-3976

EDUCATION

The University at North Carolina at Chapel Hill **Chapel Hill, NC, USA**
Ph.D. in Computer Science *Aug. 2020 - Now*
Advisor: Prof. Marc Niethammer

Shanghai Jiao Tong University **Shanghai, China**
M.Sc. in Biomedical Engineering *Sep. 2017 - Mar. 2020*
Advisor: Prof. Qian Wang
Thesis: Fast Computation and Clinical Applications of Radiomics Features

Northwestern Polytechnical University **Xi'an, Shanxi, China**
*B.Eng., **Honors College**, in Electronic Science and Technology* *Sep. 2013 - Jun. 2017*
Advisor: Prof. Wei Wei
Thesis: Intracluster Structured Low-Rank Matrix Analysis Method for Hyperspectral Denoising

RESEARCH INTERESTS

Geometry Processing, Medical Image Analysis, AI4Science.

I'm dedicated to developing interpretable and trustworthy AI algorithms for scientific discovery.
Specifically, I work on geometry processing, shape modeling, and medical image analysis.
Generally, I enjoy figuring out elegant solutions for challenging problems.

PUBLICATIONS

# indicated equal contribution

- ONeRF: Inverse Rendering of Optical Tomography.
  Yining Jiao, Marc Niethammer. (Ongoing)
- NAISR: A 3D Neural Additive Model for Interpretable Shape Representation
  Yining Jiao, Carlton Zdanski, Julia Kimbell, Andrew Prince, Cameron Worden, Samuel Kirse, Christopher Rutter, Benjamin Shields, William Dunn, Jisan Mahmud, Marc Niethammer.
  Arxiv preprint, March 2023.
- MultImp: Multiomics Generative Models for Data Imputation
  Ji-Eun Park#, Wancen Mu#, **Yining Jiao#**, Michael Love, Marc Niethammer and Natalie Stanley.
  ICML Workshop on Computational Biology (**WCB**), July 2021.
- Reducing Magnetic Resonance Image Spacing by Learning Without Ground-Truth
  Kai Xuan, Liping Si, Lichi Zhang, Zhong Xue, **Yining Jiao**, Weiwu Yao, Dinggang Shen, Dijia Wu, Qian Wang.
  Pattern Recognition, June 2021.
- cuRadiomics: A GPU-based Radiomics Feature Extraction Toolkit
  Yining Jiao, Oihane Mayo Ijurra, Lichi Zhang, Dinggang Shen, Qian Wang.
  MICCAI Workshop on Radiomics and Radiogenomics in Neuro-oncology using AI, (**Top 10 of Submitted Papers**), October 2019. [**Oral**]
- Imaging-Based Individualized Response Prediction of Carbon Ion Radiotherapy for Prostate Cancer Patients
  Shuang Wu#, **Yining Jiao#**, Yafang Zhang, Xuhua Ren, Ping Li, Qi Yu, Qing Zhang, Qian Wang, Shen Fu.
  Cancer Management and Research, September 2019.
- Can pretreatment 18F-FDG PET tumor texture features predict the outcomes of osteosarcoma treated by neoadjuvant chemotherapy?
  Hongjun Song#, **Yining Jiao#**, Weijun Wei, Xuhua Ren, Chentian Shen, Zhongling Qiu, Qingcheng Yang, Qian Wang, Quan-Yong Luo.

European Radiology, July 2019.

- Quantitative Susceptibility Mapping Based Hybrid Feature Extraction for Diagnosis of Parkinson's Disease
  Bin Xiao, Naying He, Qian Wang, Zenghui Cheng, **Yining Jiao**, E Mark Haacke, Fuhua Yan, Feng Shi.
  NeuroImage: Clinical, January 2019.
- Intracluster Structured Low-Rank Matrix Analysis Method for Hyperspectral Denoising
  Wei Wei#, Lei Zhang#, **Yining Jiao**, Chunna Tian, Cong Wang, Yanning Zhang.
  IEEE Transactions on Geoscience and Remote Sensing, August 2018.

TALKS

- Radiomics-Driven Deep Reinforcement Learning in Detecting Brain Tumor Lesions
  SJTU Graduate Student Academic Forum, July 2019. **1st Prize in Oral Presentation Group**
- Can Radiomics Features Boost the Performance of Deep Learning upon Histology Images?
  International Conference on Medical Imaging Physics and Engineering, November 2019. **Excellent Paper Award**
- ConvRadiomics: Convolutional Radiomics Feature Extraction Toolkit
  International Conference on Medical Imaging Physics and Engineering, November 2019.

AWARDS & HONORS

ICML Workshop on Computational Biology Fellowship	2021
Outstanding Graduate of Shanghai (only 4 from department)	2020
SJTU Excellent Graduate Student Award (only 2 from department)	2019
Silver Medal, Kaggle RSNA Intracranial Hemorrhage Detection Challenge	2019
Excellent Undergraduate Thesis in NWPU	2017

PROFESSIONAL ACTIVITIES

Journal Reviews: IEEE Journal of Biomedical and Health Informatics, Neural Networks.
Conference Reviews: ICCV 2021, CVPR 2022, ICCV 2023.