



Tingting Dan

Age: 26 years old

Research Interest: fMRI data analysis, manifold learning, deep learning
functional dynamic, medical image processing

ResearchGate: https://www.researchgate.net/profile/Tingting_Dan

Address	Phone	Email
Guangzhou, China	+86 15602329673	csdandycn721@mail.scut.edu



Education

South China University and Technology, Guangzhou, China

Ph.D. in Computer Science, Dept. of Computer Science & Engineering

Sept. 2019 - Now

Yunnan Normal University, Kunming, China

Master in Software Engineering, Dept. of Information Science and Technology
(Best Thesis Award)

Sept. 2016 - Jun. 2019

China West Normal University, Nanchong, China

Bachelor of Electrical Engineering, Dept. of Electrical Information Engineering

Sept. 2012 - Jun. 2016



Professional Courses and Skills

Math: Advanced mathematics, Linear algebra, Probability theory

English: CET-6, ACTFL OPIc-Intermediate Mid

Computer: Advanced operating system, Advanced database technology, Algorithm analysis and design, Artificial intelligence theory and technology

Electronic: Signal and system, Analog electronic circuit, Digital electronic technology, High frequency electronic circuit, EDA technology and its application

Programing Language: C, C++, Java, Matlab, Python

Writing Editing Software: LaTeX



Awards

National Scholarships, China (Triple, CNY 20000/Times)

Oct. 2021, Dec. 2018 and Dec. 2014

National Endeavor Fellowship, China (Twice, CNY 10000/Times)

Dec. 2015 and Dec. 2013

National electronics professionals MCU design and Development Application Engineer, China (Senior)

Jul. 2014



Research Projects

- **National Natural Science Foundation of China (no. 41661080)** (01/2015 -12/2020)
Participation, Responsible for the research of registration algorithm, Active, CNY 380000
- **Education Department of Yunnan Province, China (No. 2017TYS04)** (04/2017 - 04/2018)
Participation, Responsible for software development, Completed, CNY 5000
- **Education Department of Yunnan Province, China (No. 2018Y037)** (04/2018 - 04/2019)
Participation, Responsible for the coding of neural network, Completed, CNY 5000
- **Yunnan Normal University, China (No. yjs2018128)** (05/2018 – 05/2019)
Host, Responsible for the implementation of the main algorithm, Completed, The first prize, CNY 1500



Publications (Selected, *corresponding author, #co-first author)

- **Tingting Dan**, Zhuobin Huang, Hongmin Cai, Paul J. Laurienti, Guorong Wu*, *"Brain State Recognition Guide by Detection for Transitions of Dynamic Functional Connectivities on Riemannian Manifold."* IEEE ISBI 2022.
- **Tingting Dan**, Zhuobin Huang, Hongmin Cai, Robert G Lyday, Paul J. Laurienti, Guorong Wu*, *"Uncovering Spectral Signatures of Resting-State Functional Connectivity by Geometric Deep Learning on Riemannian Manifold."* Human Brain Mapping, 2022.
- **Tingting Dan**, Zhuobin Huang, Hongmin Cai, Paul J. Laurienti, Guorong Wu*, *" Learning Brain Dynamics of Evolving Manifold Data Instances Using Geometric-Attention Neural Network."* IEEE Transaction on Medical Imaging, 2022.
- Zhuobin Huang[#], **Tingting Dan**[#], Yi Lin, Jiazhou Chen, Hongmin Cai, Paul J. Laurienti, Guorong Wu*, *"Detecting Brain State Changes via Mean Shifting Functional Brain Networks on Riemannian Manifold,"* IEEE BIBM 2021.
- Hongmin Cai, Xiaoqi Sheng, **Tingting Dan**, Jiazhou Chen *"Manifold Harmonic Discriminant Analysis for Brain Network Classification,"* IEEE Transactions on Cybernetics, 2021 (Under review)
- **Tingting Dan**[#], Zhuobin Huang[#], Hongmin Cai, Paul J. Laurienti, Guorong Wu*, *"Detecting Brain State Changes by Geometric Deep Learning of Functional Dynamics on Riemannian Manifold."* MICCAI 2021. doi: 10.1007/978-3-030-87234-2_51
- **Tingting Dan**, Yu Hu, Han Chu, Hong Peng, Hongmin Cai*. *"Fusion of Multi-source Retinal Fundus Images via Automatic Registration for Clinical Diagnosis."* Neurocomputing, 2021:459(2). doi: 10.1016/j.neucom.2021.05.091
- **Tingting Dan**, Yang Li, Ziwei Zhu, Xijie Chen, Wuxiu Quan, Yangming Ou*, Hongmin Cai*, Hanchun Wen*, et al. *"Savable but Lost Lives when ICU Is Overloaded: A Model from 733 Patients in Epicenter Wuhan, China."* AAAI 2021, 35 (6), 4804-4811.
- Zhihao Fan, **Tingting Dan**, Baoyi Liu, Xiaoqi Sheng, Honghua Yu, Hongmin Cai*, *"SGUNet: Style-Guided UNet for Adversely Conditioned Fundus Image Super-Resolution"* Neurocomputing, 2021:465(5), doi: 10.1016/j.neucom.2021.08.137
- Ziwei Zhu[#], Xingming Zhang, Guihua Tao[#], **Tingting Dan**[#], Hanchun Wen, Hongmin Cai*, *"Classification of COVID-19 by Compressed Chest CT Image through Deep Learning on a Large Patients Cohort,"* Interdisciplinary Sciences Computational Life Sciences, 2021, 13(2). doi: 10.1007/s12539-020-00408-1

- YueZhang, Qinjian Huang, Bin Zhang, **Tingting Dan**, Hong Peng, Hongmin Cai*, "*Deep Multiview Clustering via Iteratively Self-Supervised Universal and Specific Space Learning*" IEEE Transactions on Cybernetics, 2021, PP(99):1-13. doi: 10.1109/TCYB.2021.3086153
- **Tingting Dan**, Yang Li, Xijie Chen, Wuxiu Quan, Hongmin Cai*, Yangming Ou*, et al. "*Machine Learning to Predict ICU Admission, ICU Mortality and Survivors' Length of Stay Among COVID-19 Patients: Toward Optimal Allocation of ICU Resources.*" IEEE BIBM 2020. doi: 10.1109/BIBM49941.2020.9313292
- **Tingting Dan**, Yu Hu, Zhihao Fan, Hong Peng, Hongmin Cai*. "*Reconstruction of 3D Retina from Multi-viewed Stereo Fundus Images via Dynamic Registration.*" IEEE BIBM 2020. doi: 10.1109/BIBM49941.2020.9313171
- Yang Li, Hong Peng, **Tingting Dan**, Yu Hu, Guihua Tao, Hongmin Cai*. "*Coarse-to-fine Nasopharyngeal Carcinoma Segmentation in MRI via Multi-stage Rendering.*" IEEE BIBM 2020. doi: 10.1109/BIBM49941.2020.9313574
- Xijie Chen, Miao He, **Tingting Dan**, Nan Wang, Hongmin Cai*, Hongning Xie*, "*Automatic Measurements of Fetal Lateral Ventricles in 2D Ultrasound Images Using Deep Learning,*" Frontiers in Neurology, 2020, 11:526. doi: 10.3389/fneur.2020.00526
- Qinjian Huang, Yue Zhang, Hong Peng, **Tingting Dan**, Wanlin Weng, Hongmin Cai*, "*Deep Subspace Clustering to Achieve Jointly Latent Feature Extraction and Discriminative Learning,*" Neurocomputing, 2020, 404(3). doi: 10.1016/j.neucom.2020.04.120
- Zhihao Fan, **Tingting Dan**, Honghua Yu, Hongmin Cai*, "*Single Fundus Image Super-Resolution Via Cascaded Channel-Wise Attention Network,*" IEEE Engineering in Medicine and Biology Society, 2020, doi: 10.1109/EMBC44109.2020.9176428
- Fei Song, **Tingting Dan**[#], Yang Yang*, Kun Yang, "*Small UAV Based Multi-temporal Change Detection for Monitoring Cultivated Land Cover Changes in Mountainous Terrain,*" Remote Sensing Letters, 2019, 10(6): 573-582. doi: 10.1080/2150704X.2019.1576949
- **Tingting Dan**, Yang Yang*, Lin Xing*, et al. "*Multifeature Energy Optimization Framework and Parameter Adjustment-based Nonrigid Point Set Registration.*" Journal of Applied Remote Sensing. 2018, 12(3):12-27. doi:10.1117/1.JRS.12.035006
- Zhuoqian Yang, **Tingting Dan***, Yang Yang*, "*Multi-temporal Remote Sensing Image Registration Using Deep Convolutional Features,*" IEEE ACCESS. 2018, pp, doi: 10.1109/ACCESS.2018.2853100
- Fei Song, Mengya Li, Yang Yang, Kun Yang, Xueyan Gao, **Tingting Dan**, "*Small UAV Based Multi-Viewpoint Image Registration for Monitoring Cultivated Land Changes in Mountainous Terrain,*" International Journal of Remote Sensing, 2018 39(21):1-24. doi: 10.1080/01431161.2018.1516051
- **Tingting Dan**, Xinang Liu, Yang Yang*, Lin Xing*. "*Mixture Feature Based Multi-temporal Unstructured Road Image Registration.*" IEEE International Conference on Electronic Measurement & Instruments. 2017, Vol. 2: 547-553, doi: 10.1109/ICEMI.2017.8265888



Personal Statement

There is only one corner of the universe you can be sure of improving, and that is your own self. I am very honored to follow my supervisor and Dr. Wu from the University of North Carolina at Chapel Hill working in medical image analysis. Im deeply eager to learn more about it.

Whats more, I am a student who is hard -working and conscientious about scientific research. In the future, I will focus on understanding the neurophysiological signatures and behavioral relevance of time-varying brain functional connectivity.