Nan Chen

Phone: +8615166565621 | Age: 23 | Email: Nan.Vincent.Chen@gmail.com

RESEARCH INTEREST

Machine Learning; Complex Network; Brain Imaging, Network Neuroscience

EDUCATION

Lanzhou University   M.E. 09/2019-Present
School of Information Science and Engineering, Major in Computer science and technology   *GPA: 3.59/4*

Taiyuan University of Technology   B.E. 09/2014-06/2018
College of Information Engineering, Major in Automation   *GPA: 3.47/4*

RESEARCH EXPERIENCE

Ubiquitous Awareness and Intelligent Solution Lab   04/2019-Present
Lanzhou University   *Postgraduate student*

- Engaged in researches of brain network modeling and community detection, especially in dynamic and multimodal brain networks
- 16 journal papers indexed by SCI and 1 conference paper were submitted (first author 5, other authors 11), in which 5 of them have been accepted

WORK EXPERIENCE

Data Intelligence Centre   07/2018-04/2019
Inspur   *Artificial Intelligence Algorithm Engineer*

- Participated in the Knowledge Mapping Project of China Foreign Languages Publishing Administration, responsible for the development of fundamental NLP tools and the visualization of knowledge mapping
- Participated in the precipitation trend prediction project of Guizhou Meteorological Bureau, responsible for data processing and deep model construction
- Participated in the KGO search project of China Knowledge Centre for Engineering Sciences and Technology, responsible for the searching algorithm

PUBLICATIONS

Nan Chen, Jie Shi, Yongchao Li, Shanling Ji, Ying Zou, Lin Yang, Zhijun Yao, Bin Hu. "Decreased Dynamism of Overlapping Brain Sub-networks in Major Depressive Disorder". *Journal of Psychiatric Research*, 2020. xx(x): xxx-xxx.

Nan Chen, Guangyao Liu, Man Guo, Yongchao Li, Zhijun Yao, Bin Hu. "Calcarine as a bridge between brain function and structure in Irritable Bowel Syndrome: a fMRI-DTI based multiplex network analysis". *Neurogastroenterology & Motility*, 2020, xx(x): xxx-xxx.

Nan Chen, Man Guo, Yongchao Li, Shan Li, Zhijun Yao, Bin Hu. "Estimation of discriminative multimodal connectivity using massage-passing-based nonlinear network fusion". *IEEE Journal of Biomedical and Health Informatics*, 2020. **Under review**

Nan Chen, Lirong Teng, Man Guo, Yongchao Li, Zhengwu Yang, Yu Fu, Zhijun Yao, Bin Hu. "Automatic Diagnosis of Major Depressive Disorder with Integration of Dynamic and Static Properties of Brain Functional Network". *Artificial Intelligence in Medicine*, 2020. **Under review**

Hong Chai, **Nan Chen**, Shan Li, Lei Fang. "Fusing intensity, texture, shape and deep model-learned information of nodules to differentiate lung cancer and pulmonary tuberculosis on PET/CT images". *Annals of Nuclear Medicine*, 2020. (Co-first Author) **Under review**

Yongchao Li, **Nan Chen**, Yin Wang, Lin Yang, Weihao Zheng, Zhijun Yao, Bin Hu. "Integration of a novel attribute and classical topology metrics of hyper-networks for automatic diagnosis of Major depressive disorder". *IEEE HealthCom 2020*, 2020: IEEE

Guangyao Liu, Shan Li, **Nan Chen**, Ziyang Zhao, Man Guo, Hong Liu, Jie Feng, Dekui Zhang, Zhijun Yao, Bin Hu. "Vulnerable functional connections in irritable bowel syndrome patients rather than structure". *Journal of Neurogastroenterology and Motility*, 2020, xx(x): xxx-xxx.

Man Guo, Tiancheng Wang, Zhe Zhang, **Nan Chen**, Yongchao Li, Yin Wang, Zhijun Yao, Bin Hu. "Diagnosis of major depressive disorder using whole-brain effective connectivity networks derived from resting-state functional MRI". *Journal of Neural Engineering*, 2020. 17(5): 056038

Honors & Awards

Second Prize, Freescale Intelligence Car Competition, 2015
First Prize, China Undergraduate Mathematical Contest in Modeling, 2016
Meritorious Winner, The Interdisciplinary Contest in Modeling, 2017
Individual Scholarship, Taiyuan University of Technology, 2017
Scholarship for Science and Technology Practice, Taiyuan University of Technology, 2017
The Third Prize Scholarship, Lanzhou University, 2019
The First Prize Scholarship, Lanzhou University, 2020

Technical Skills

Languages: Python, Java, C/C++, Matlab
Pre-processing Tools: DPABI (fMRI), PANDA (DTI), Brainstorm (MEG)
Scientific Computing Libraries: NumPy, SciPy and Pandas
Drawing Tools: Matplotlib, Seaborn, Origin
Algorithms: Perceptron, kNN, Naïve Bayes, Decision Tree, Logistic Regression, SVM, Boosting, Random Forest, EM, HMM, CRF, Clustering, SVD, PCA, LSA, NMF, LDA, PageRank, BP
Frameworks: TensorFlow, Keras
Other: Matrix Theory, Graph Theory, Optimization, Complex Network, Data Structure

References

XXX, Professor, Lanzhou University (xxx@lzu.edu.cn, +86)
XXX, Professor, Lanzhou University (xxx@lzu.edu.cn, +86)