Chunyang Ruan

◉ *Zhanghen Road No.825, Shanghai, China* ▢ *+(86) 182 2170 8867*

✉ cyruan16@fudan.edu.cn | ⌂ ruanchunyang.tech | ◉ https://github.com/rGitcy | in * | ✇ *

Education

2009-2013, **Henan University of Urban Construction**, Henan, China
B.S. in Computer Science, June 2013

2013-2016, **Zhengzhou University**, Henan, China
MA.Sc in Computer Science, June 2016

2016-Now, **Fudan University**, Shanghai, China
Ph.D. candidate in Computer Science

Research/Project Experience

Herbs Recommendation   **Advisor:** Prof. Yanchun Zhang
Machine Learning for Traditional Chinese Medicine (TCM)   ***Partners:*** *Shuguang Hospital*

- Collecting the Pharmacopoeia of the People's Republic of China 2015 Edition
  and 3K+ TCM clinical cases
- Constructing heterogeneous TCM network and using EM and PGM to achieve soft clustering
- Detecting the herb-symptom relations and helping doctors to prescribe

Auto-Prescribe for Lung tumor   **Advisor:** Prof. Yanchun Zhang
Machine Learning for TCM clinical records   ***Partners:*** *Longhua Hospital*

- Collecting the 7K+ clinical records and preprocessing data
- Using Word2Vec, Attention and Sequence2Sequence to mining text
- Detecting the pattern of TCM prescription and helping doctors to prescribe

Publications/Talks

1. THCluster: Herb supplements categorization for precision traditional Chinese medicine. Chunyang Ruan, Ye Wang, Yanchun Zhang, et al.
IEEE International Conference on Bioinformatics and Biomedicine (CCF B), Kansas City, MO, USA, 2017

2. HINs Based Clustering for Categorizations of Traditional Chinese Medicine Formula. Xintian Chen, **Chunyang Ruan**, Yanchun Zhang, et al.
IEEE International Conference on Bioinformatics and Biomedicine (CCF B), Madrid, Spain, 2018

3. Exploring Regularity in Traditional Chinese Medicine Clinical Data Using Heterogeneous Weighted Networks Embedding. Chunyang Ruan, Ye Wang, Jiangang Ma, et al.
International Conference on Database Systems for Advanced Applications (CCF B), Chiang Mai, Thailand, 2019

4. Discovering Regularities from Traditional Chinese Medicine Prescriptions via Bipartite Embedding Model. Chunyang Ruan, Yun Yang, et al.
International Joint Conferences on Artificial Intelligence 2019 (CCF A)

5. Adversarial Heterogeneous Network Embedding with Meta-Path Attention Mechanism. Chunyang Ruan, Jiangang Ma, Xintian, et al.
Journal of computer science and technology (SCI/CCF B)

6. Multi-scale Graph Convolutional Networks for Traditional Chinese Medicine Knowledge Discovery. Chunyang Ruan, Yun Yang, et al.
ACM The World Wide Web Conference 2020 (CCF A) **(pre-submit)**

7. Cost Sensitive SVM based Mutli-label Classify for Traditional Chinsese Medical Prescription Generation. Chaohan Pei, **Chunyang Ruan**, et al.
IEEE International Conference on Bioinformatics and Biomedicine (CCF B), San Diego, CA, USA, 2019 **(underreview)**

8. Ensemble model for determining prescription regularity in traditional Chinese medicine. Chunyang Ruan, Yun Yang, et al.
BMC Complementary and Alternative Medicine (SCI IF 2.82)**(underreview)**

9. Heterogeneous Information Network Based Clustering for Precision Traditional Chinese Medicine. Xintian Chen, **Chunyang Ruan**, Yanchun Zhang.
BMC Medical Informatics and Decision Making (SCI IF 2.67)**(underreview)**

Talk-1   Chunyang Ruan
Herb supplements categorization for precision traditional Chinese medicine

 Talk at IEEE International Conference on Bioinformatics and Biomedicine, Kansas City, MO, USA,

Nov.2017

Talk-2   Chunyang Ruan
Exploring Regularity in Traditional Chinese Medicine Clinical Data

 Talk at International Conference on Database Systems for Advanced Applications, Chiang Mai, Thai-

land, Apr.2019

Selected Awards

2019	**Excellent academic scholarship,** 2018-2019	*Fudan University*
2018	**Excellent academic scholarship,** 2017-2018	*Fudan University*
2018	**Excellent League Member,** 2017-2018	*Fudan University*
2017	**Excellent academic scholarship,** 2016-2017	*Fudan University*

English Skills

College English Test Band 6

Score:498

Academic English

Having a good ability of academic writing and general communication