

1 Personal Information

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2 Work Experience

2019/08- Present Postdoctoral Associate in Li-Lab, The Jackson Laboratory for Genomic Medicine. Adv: Dr. Sheng Li, see also web page

2010/07- 2019/08 Staff Lecturer at school of information engineering in Zhengzhou University¹, P.R. China, , see also web page

3 Education

2007/09- 2009/06 Visiting Ph.D. at school of engineering in Blekinge Institute of Technology(BTH)², Sweden

2004/06, 2010/06 Bachelor and Ph.D. degrees at Dept. of computer science and technology, Xi'an Jiaotong University(XJTU)³, P.R. China

4 Awards & Fundings

2020 First place in Speak4Science of UCONN Health and JAX Postdoctoral Meeting

2018 Key project of improvement of students' innovative ability and top talent training in ZZU(in Zhengzhou University), **Supervisor teacher**

2017 Supervisor of project of innovative and entrepreneurial training program for college students in ZZU

2016 National Natural Science Foundation of China, 61572444, Research on DNA Computing Methods for Logical Tree Model Tests

¹ZZU is the abbreviation for Zhengzhou University. ZZU is in the list of *Chinese construction plan of "double-first universities"*, which means world-first university and first-class discipline. See also <http://www.zzu.edu.cn>.

²BTH is the abbreviation for Blekinge Tekniska Högskola. See also <http://www.bth.se>.

³XJTU is the abbreviation for Xi'an Jiaotong University. See also <http://www.xjtu.edu.cn>.

- 2014** National Natural Science Foundation of China, 61130304, Research on construction theory and methods of large-scale fuzzy concept lattices with limited memory space
- 2013** The *second prize* of the academic award for natural and scientific paper in Henan Province, China
- 2010** *Excellent graduate* in XJTU, *Pengkang's* Ph.D. scholarship in XJTU
- 2008** Swedish provincial funding: Rough set based knowledge acquisition method and it's application in E-health system
- 2007, 2008** China Scholarship Council Ph.D. abroad study scholarship⁴
- 2005** China graduate mathematical contest in modeling (CGMCM)⁵, *2nd Prize*
- 2003** ACM/ICPC (International Collegiate Programming Contest)⁶ asia regional contest, Beijing region, *honorable mention*
- 1998** China national olympiad in informatics in Henan province (NOI⁷), *1st prize*

5 Research Interests

Research interests lie at *machine learning, bioinformatics, DNA computing, and computer vision*

Selected publications

- [1] Weijun Zhu, Yingjie Han, Huanmei Wu*, Yang Liu*, Xiaofei Nan, Qinglei Zhou. Predicting the results of molecular specific hybridization using boosted tree algorithm[J]. *Concurrency and Computation: Practice and Experience*. Jan. 2020, **32**(1):e4982

⁴This program is sponsored by China Scholarship Council. See also <http://www.csc.edu.cn/en>.

⁵The CGMCM contest is a contest where teams of graduates use mathematical modeling to present their solutions to real world problems. This national-wide contest is organized by the National Organizing Committee (NOC) of CGMCM, which is an organization setup by the Ministry of Education of P.R.C. and CSIAM (China Society for Industrial and Applied Mathematics). See also <http://www.gmcm.cn>.

⁶The ACM International Collegiate Programming Contest (ICPC) provides opportunities to sharpen and demonstrate problem-solving, programming, and teamwork skills. The contest provides a platform for ACM, industry, and academia to encourage computing professionals. See also <http://icpc.baylor.edu>.

⁷The NOI supports pre-college computing around the country through computer programming competitions and training materials. See also <http://www.noi.cn>.

- [2] Weijun Zhu, Yichen Liu, Yongwen Fan, Yang Liu*, Ruitong Liu. If Air-Gap Attacks Encounter the Mimic Defense[C]. 2019 9th International Conference on Information Science and Technology (ICIST). IEEE, 2019, 485–490
- [3] Yingjie Han, Weijun Zhu, Linfeng Zhu, Yang Liu, Qinglei Zhou. Linear temporal logic formula Xp model DNA computing method[J]. Journal of Chinese Computer Systems. 2017, **38**(3):553–558
- [4] Yang Liu, Zhuo Zhang, Qinglei Zhou. Inequality based Diagnosis Rule Mining Method on Medical Decision Tables[J]. Journal of Chinese Computer Systems. 2015, **36**(5):1052–1055
- [5] Yang Liu, Zhuo Zhang, Qinglei Zhou. Research on Fuzzy Rough Sets based Rule Induction Methods for Healthcare Data[J]. Chinese Computer Science. 2014, **41**(12):164–167
- [6] Yang Liu, Qinglei Zhou, Boqin Feng. A Weighted Fuzzy Rough Sets Model with Hybrid-Attribute Reduction in Granular Computing[J]. Journal of Xi'an Jiaotong University. 2011, **45**(10):43–47
- [7] Yang Liu, Luyang Jiao, Guohua Bai, Boqin Feng. Feature based rule learner in noisy environment using neighbourhood rough set model[J]. International Journal of Software Science and Computational Intelligence, IGI Global, USA. 2010, **2**(2):68–87
- [8] Yang Liu, Guohua Bai, Qinglei Zhou, Elisabeth Rakus-Andersson. Rough Sets Based Inequality Rule Learner for Knowledge Discovery[C]. International Conference on Rough Sets and Current Trends in Computing. Springer, 2012, 100–105
- [9] Yang Liu, Qinglei Zhou, Elisabeth Rakus-Andersson, Guohua Bai. A fuzzy-rough sets based compact rule induction method for classifying hybrid data[C]. International Conference on Rough Sets and Knowledge Technology. Springer, 2012, 63–70
- [10] Yang Liu, Guohua Bai, Boqin Feng. CompactLEM2: A Scalable Rough Set based Knowledge Acquisition Method that Generates Small Number of Short Rules[C]. Du Zhang, Yingxu Wang, Witold Kinsner, (Editors) ICCI 2008. Stanford University, USA, August 14-16, 2008. 7th IEEE International Conference on Cognitive Informatics. IEEE, 2008, 215–222
- [11] Yang Liu, Guohua Bai, Boqin Feng. On Mining Rules that Involve Inequalities from Decision Table[C]. Du Zhang, Yingxu Wang, Witold Kinsner, (Editors) ICCI 2008. Stanford University, USA, August 14-16, 2008. 7th IEEE International Conference on Cognitive Informatics. IEEE, 2008, 255–260

SELECTED PUBLICATIONS Yang Liu's CV

- [12] Yang Liu, Boqin Feng, Guohua Bai. Compact Rule Learner on Weighted Fuzzy Approximation Spaces for Class Imbalanced and Hybrid Data[C]. Chien-Chung Chan, Jerzy W. Grzymala-Busse, Wojciech P. Ziarko, (Editors) RSCTC 2008. Akron, OH, USA, October 23 - 25, 2008. The Sixth International Conference on Rough Sets and Current Trends in Computing. Springer, 2008, vol. 5306 of Lecture Notes in Computer Science, 262–271
- [13] Yang Liu, Guohua Bai, Boqin Feng. Multi-agent Based Multi-knowledge Acquisition Method for Rough Set[C]. Guoyin Wang, Tian rui Li, Jerzy W. Grzymala-Busse, Duoqian Miao, Andrzej Skowron, Yiyu Yao, (Editors) RSKT 2008. The Third International Conference on Rough Sets and Knowledge Technology. Springer, 2008, vol. 5009 of Lecture Notes in Computer Science, 140–147