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Education

Ph.D. Computer Science, Rensselaer Polytechnic Institute, 2016 - now
M.S. Applied Mathematics, Southwest Jiaotong University, 2011 - 2014
B.S. Information & Computing Science, Tianjin University of Commerce, 2005 - 2009

Research Interests

Machine Learning / Learning to Rank / Optimization / Information Retrieval (Extraction)

Working Experience

Spring - Summer 2017: Multiround Winner Determination, RPI/**Research Assistant**

- Devise heuristic strategies (sampling, caching, pruning) to search all tied winners
- Train reinforcement learning models to simulate the voting procedure
- Improve the baseline DFS in terms of running time & number of nodes

Spring 2017: CSCI 4150 Introduction to Artificial Intelligence, RPI/**Teaching Assistant**

Fall 2016: CSCI 6100 Machine Learning from Data, RPI/**Teaching Assistant**

Summer 2016: Learning to Vote Fairly, RPI/**Research Assistant**

- Implement more than 20 voting rules (e.g. Borda count, Condorcet method, STV)
- Learn the fairness criteria in voting rules with machine learning approaches
- Apply data augmentation to enhance the learning performance

July 2014 - Mar. 2016: Chengdu Antusuoji Network Technology Co., Ltd./**Software Developer**

- Collect web information (commercial products, job positions)
- Build an information retrieval system based on SOLR

Projects

Fall 2016: Matching Algorithm for OKCollege (now *CollegeAI*)

- Design a bilinear model to match students and collegess preferences
- Optimize a ranking-related loss function with SGD to train the model

Summer 2013: Automating Data Collection

- Crawl over 10,000 professors profiles from top Chinese universities
- Semi-automate the inefficient and expensive manual collection procedure
- Align the collected data and output with homogeneous content

Summer 2012: Meta Extraction from PDF Papers

- Crawl 5,000 research papers in PDF and related meta data from *arXiv*
- Recognize meta blocks (titles, authors et al) with handcrafted rules and ML techniques

Publications

Jiang, Chunheng, Sujoy Sikdar, Jun Wang, Lirong Xia, and Zhibing Zhao. Practical Algorithms for Computing STV and Other Multi-Round Voting Rules. In *EXPLORE-2017: The 4th Workshop on Exploring Beyond the Worst Case in Computational Social Choice*, 2017

Jiang, Chunheng and Wenbin Lin. DEARank: A Data-envelopment-analysis-based Ranking Method. *Machine Learning*, 2015, 101: 415 – 435

Pei, Zhongyou, **Chunheng Jiang**, and Wenbin Lin. Random Walks on the Bipartite Graph for Personalized Recommendation. In *2013 International Conference on Computer Science and Artificial Intelligence*, Yuetong Lin and Gabriel Alungbe, Eds., Chengdu, China, 2013, 97 – 102

Programming Skills

Python, Java, C/C++, Matlab, Mathematica, Lingo / Eclipse, PyCharm, \LaTeX , Markdown, vim, OS X