YIFAN WANG

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EDUCATION

Georgia Institute of Technology *Aug 2021 - now*
Ph.D in Computer Science

Tsinghua University *Aug 2016 - Jun 2020*
Graduated with B.Eng in Computer Science, with honor

PUBLICATIONS

- Zhuang, H., Wang, C., and Wang, Y. Identifying outlier arms in multi-armed bandit. In *Annual Conference on Neural Information Processing Systems (NeurIPS), 2017*

RESEARCH EXPERIENCE

Truss Generation via Monte Carlo Tree Search Sep 2020 - Dec 2020
Research Assistant

· Advisor: Xianzhong Zhao, Professor, College of Civil Engineering, Tongji University
· Research done in Shanghai Qi Zhi Institute.
· Formulated truss generation problem into decision process.
· Solved the truss generation problem via Kernel-Regression Upper Confidence Search Tree.
· Applied the generation model to different application circumstances.
· Contributed to two second-author papers ready to be submitted to *Computer & Structures* (Journal in Civil Engineering area, IF = 3.664).

Learning Concept Prerequisite Relations from MOOCs information Nov 2019 - May 2020
Research Assistant

· Advisor: Jie Tang, Professor, Department of Computer Science and Technology, Tsinghua University
· Helped construct a dataset in Chinese for the project.
· Built a concept dependency graph from student behavior information.
· Trained a binary classifier by constructing massive features of MOOCs information.
· Contributed to a third-author paper ready to be submitted to IJCAI2021.

Improved s-Rounding Technique for Semidefinite Programs Jun 2019 - Nov 2019
Research Assistant

· Advisor: Nina Balcan, Associate Professor, School of Computer Science, Carnegie Mellon University
· Found an exact class of instance that any specific s can be the optimal parameter of s-linear rounding function class.
· Defined expected result of rounding step using s-linear rounding function and related expected output to differences of two 2-dimensional Gaussian distributions.
· Proposed new s-rounding function that behaved better than s-linear rounding function in experiment.

Modeling and Predicting Citation Counts Feb 2018 - Jan 2019
Research Assistant

· Advisor: Jie Tang, Professor, Department of Computer Science and Technology, Tsinghua University

- Extracted citing network from Microsoft Academic Graph data set.
- Designed a model based on TCN to predict citation counts.
- Implemented model to data set and calculated accuracy among fully-connected neural network model and RNN model with GRU and TCN model. Found TCN model achieved state-of-art results.

Identifying Outlier Arms in Multi-Armed Bandits Feb 2017 - Dec 2017
Research Assistant

- Advisor: Chi Wang, Senior Researcher, Microsoft Research Redmond Lab and Honglei Zhuang, Ph.D student, University of Illinois Urbana-Champaign
- Modified multi-armed bandit pulling algorithm named Weighted Round-Robin.
- Implemented Weighted Round-Robin algorithm to data set cloned from Twitter with longitude and latitude information, for locating longitude and latitude coordinates of specific buildings.
- Contributed to a third-author paper to be accepted to NeurIPS (Conference and Workshop on Neural Information Processing Systems) 2017.

AWARDS

2016 ACM-ICPC Asia Beijing Regional Gold Medal (6 of 198)
2016 CCPC (China Collegiate Programming Contest) Changchun Regional Gold Medal (7 of 180)
2019 CCPC (China Collegiate Programming Contest) Harbin Regional Silver Medal
National Scholarship in 2017 (top 3%)

SKILLS

Computer Languages	C/C++, Java, Python, MATLAB, Verilog
Software & Tools	LaTeX, Excel, HTML, QT, Vivado

10 years of programming experience, solid programming experience in C, C++ (more than 100k lines);
Skilled on most kinds of algorithms and data structures