YONGGANG JIANG

E-mail: yjiang@mpi-inf.mpg.de

E14, Room 315, Saarland Informatics Campus

EDUCATION

Max Planck Institute for Informatics and Saarland University   *Apr. 2023 – Present*
PhD in Computer Science
Advisor: Danupon Nanongkai

Max Planck Institute for Informatics and Saarland University   *Oct. 2021 – Mar. 2023*
Preparatory Phase for Doctoral Study

Nanjing University   *Sep. 2017 – Jul. 2021*
B.S. in Computer Science and Technology
GPA: 94.4/100, Ranking: 1/31

University of California, Berkeley   *Jan. 2020 – May 2020*
Berkeley International Study Program
GPA: 4.0/4.0

PUBLICATIONS

*Co-authors are listed in alphabetical order.

[1] **Parallel $(1+\epsilon)$-Approximate Multi-Commodity Mincost Flow in Almost Optimal Depth and Work**
Bernhard Haeupler, Yonggang Jiang, Yaowei Long, Thatchaphol Saranurak, Shengzhe Wang.
In submission.

[2] **Reviving Thorup's Shortcut Conjecture**
Aaron Bernstein, Maximilian Probst Gutenberg, Bernhard Haeupler, Gary Hoppenworth, Yonggang Jiang, Seth Pettie, Thatchaphol Saranurak, Leon Schiller.
In submission.

[3] **Parallel Small Vertex Connectivity in Near Linear Work and Polylogarithmic Depth**
Yonggang Jiang, Changki Yun.
In submission.

[4] **Shortcuts and Transitive-Closure Spanners Approximation**
Parinya Chalermsook, Yonggang Jiang, Sagnik Mukhopadhyay, Danupon Nanongkai.
In submission.

[5] **New Oracles and Labeling Schemes for Vertex Cut Queries**
Yonggang Jiang, Merav Parter, Asaf Petruschka.
In submission.

[6] **Perfect Simulation of Las Vegas Algorithms via Local Computation**
Xinyu Fu, Yonggang Jiang, Yitong Yin.
In submission.

[7] **Parallel Minimum Cost Flow in Near-Linear Work and Square Root Depth for Dense Instances**
Jan van den Brand, Hossein Gholizadeh, Yonggang Jiang, Tijn de Vos.
ACM Symposium on Parallelism in Algorithms and Architectures (SPAA) 2022.

[8] **Deterministic Vertex Connectivity via Common-Neighborhood Clustering and Pseudorandomness**
Chaitanya Nalam, Yonggang Jiang, Thatchaphol Saranurak, Sorrachai Yingchareonthawornchai.
ACM Symposium on Theory of Computing (STOC) 2025.

[9] **Global vs. s-t Vertex Connectivity Beyond Sequential: Almost-Perfect Reductions & Near-Optimal Separations**
Joakim Blikstad, Yonggang Jiang, Sagnik Mukhopadhyay, Sorrachai Yingchareonthawornchai.
ACM Symposium on Theory of Computing (STOC) 2025.

[10] **Parallel and Distributed Exact Single-Source Shortest Paths with Negative Edge Weights**
Vikrant Ashvinkumar, Aaron Bernstein, Nairen Cao, Christoph Grunau, Bernhard Haeupler, Yonggang Jiang, Danupon Nanongkai, Hsin Hao Su.
European Symposium on Algorithms (ESA) 2024.

[11] **Finding a Small Vertex Cut on Distributed Networks**
Yonggang Jiang, Sagnik Mukhopadhyay.
ACM Symposium on Theory of Computing (STOC) 2023.

[12] **Robust and Optimal Contention Resolution without Collision Detection**
Yonggang Jiang, Chaodong Zheng.
ACM Symposium on Parallelism in Algorithms and Architectures (SPAA) 2022.

[13] **Tight Trade-off in Contention Resolution without Collision Detection**
Haimin Chen, Yonggang Jiang, Chaodong Zheng.
ACM Symposium on Principles of Distributed Computing (PODC) 2021.

HONORS & AWARDS

Outstanding Graduate, Nanjing University	*2021*
National Elite Program Scholarship, Outstanding Prize (top 1)	*2018, 2019, 2020*
China Collegiate Programming Contest (CCPC), Gold Medal	*2018*
National Olympiad in Informatics in Provinces (NOIP), First Prize	*2015*