Daniel Schoepflin

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Research

My primary research interests are algorithmic game theory, mechanism design, and approximation algorithms.

Employment History

Rutgers University - DIMACS — Piscataway, NJ
Simons Postdoctoral Leadership Fellow — *Current*

Simons Laufer Mathematical Sciences Institute (previously MSRI) — Berkeley, CA
Postdoctoral Fellow — *Aug. 2023 - Dec. 2023*

Google — Mountain View, CA
Research Intern — *June 2022 – Sept. 2022*

Smart Information Flow Technologies — Minneapolis, MN
Research Intern — *Sept. 2015 – Mar. 2016*

Oracle — Bala Cynwyd, PA
Software Engineering Intern — *Sept. 2014 – Mar. 2015*

Susquehanna International Group, LLP — Bala Cynwyd, PA
Software Engineering Intern — *Sept. 2013 – Mar. 2014*

Education

Drexel University — Philadelphia, PA
Ph.D. in Computer Science; Advisor: Vasilis Gkatzelis — *Sept. 2017 – Aug. 2023*

Drexel University — Philadelphia, PA
B.S. in Electrical Engineering, B.S. in Computer Engineering — *Sept. 2012 – Jun. 2017*

Conference Publications (authors listed alphabetically unless otherwise noted)

Algorithmic and Structural Complexities of Menus in Unit-Demand Auctions
Daniel Schoepflin, Clayton Thomas, Matthew Weinberg
21st Conference on Web and Internet Economics *(WINE 2025)*

Strategyproof Tournament Rules for Teams with a Constant Degree of Selfishness
David Pennock, Daniel Schoepflin, Kangning Wang
21st Conference on Web and Internet Economics *(WINE 2025)*

A Truthful and Accurate Forecasting Competition Mechanism on Bayesian Network Structured Events
Chun Lau, Daniel Schoepflin, David Pennock (By Contrib.)
18th International Symposium on Algorithmic Game Theory *(SAGT 2025)*

Optimal Mechanisms for Consumer Surplus Maximization
Tomer Ezra, Daniel Schoepflin, Ariel Shaulker
57th Annual ACM Symposium on Theory of Computing *(STOC 2025)*

On the Power of Randomization for Obviously Strategyproof Mechanisms
Shiri Ron, Daniel Schoepflin
39th Annual AAAI Conference on Artificial Intelligence *(AAAI 2025)*

Clock Auctions Augmented with Unreliable Advice
Vasilis Gkatzelis, Daniel Schoepflin, Xizhi Tan
36th ACM-SIAM Symposium on Discrete Algorithms *(SODA 2025)*

Bayesian and Randomized Clock Auctions
Michal Feldman, Nick Gravin, Vasilis Gkatzelis, Daniel Schoepflin
23rd ACM Conference on Economics and Computation *(EC 2022)*

Beyond Cake Cutting: Allocating Homogeneous Divisible Resources
Ioannis Caragiannis, Alexandros Psomas, Vasilis Gkatzelis, Daniel Schoepflin
21st International Conference on Autonomous Agents and Multi-Agent Systems *(AAMAS 2022)*

Optimal Deterministic Clock Auctions and Beyond
George Christodoulou, Vasilis Gkatzelis, Daniel Schoepflin
13th Innovations in Theoretical Computer Science Conference *(ITCS 2022)*

Deterministic Budget Feasible Clock Auctions
Eric Balkanski, Pranav Garimidi, Vasilis Gkatzelis, Daniel Schoepflin, Xizhi Tan
33rd ACM-SIAM Symposium on Discrete Algorithms *(SODA 2022)*

Prior-free Clock Auctions for Bidders with Interdependent Valuations
Vasilis Gkatzelis, Rishi Patel, Emmanouil Pountourakis, Daniel Schoepflin
14th International Symposium on Algorithmic Game Theory *(SAGT 2021)*

PROPm Allocations of Indivisible Goods to Multiple Agents
Artem Baklanov, Pranav Garimidi, Vasilis Gkatzelis, Daniel Schoepflin
30th International Joint Conference on Artificial Intelligence *(IJCAI 2021)*

Achieving Proportionality up to the Maximin Item with Indivisible Goods
Artem Baklanov, Pranav Garimidi, Vasilis Gkatzelis, Daniel Schoepflin
35th AAAI Conference on Artificial Intelligence *(AAAI 2021)*

Journal Publications

Bayesian and Randomized Clock Auctions
Michal Feldman, Nick Gravin, Vasilis Gkatzelis, Daniel Schoepflin
Operations Research *(July-August 2025)*

Deterministic Budget Feasible Clock Auctions
Eric Balkanski, Pranav Garimidi, Vasilis Gkatzelis, Daniel Schoepflin, Xizhi Tan
Operations Research *(Forthcoming)*

Working Papers

Algorithmic Collusion at Inference Time: A Meta-game Design and Evaluation
Yuhong Luo, Daniel Schoepflin, Xintong Wang
Under Submission

Some Conditions when Experts Algorithms are Incentive Compatible in the Large
Chun Lau, David Pennock, Daniel Schoepflin
Under Submission

Teaching

Professor - CS 205: Introduction to Discrete Structures I, Rutgers University, *Fall 2024, Spring 2025*

Professor - CS 618: Algorithmic Game Theory, Drexel University, *Spring 2023*

TA - New Horizons in Theoretical Computer Science Summer School, *Summer 2021*

TA - CS 521: Data Structures and Algorithms I (Graduate), Drexel University, *Fall 2020, 2021*

TA - CS 457: Data Structures and Algorithms I (Undergraduate), Drexel University, *Fall 2017, 2018, 2019*

Awards

Outstanding Dissertation Award
Drexel University, *2023*

Jay Modi Memorial Award
Drexel University Department of Computer Science, *2022*

Student Leadership Award
Drexel University Department of Computer Science, *2021*

PhD Research Excellence Award
Drexel College of Computing and Informatics, *2021*

Teaching Excellence Award
Drexel College of Computing and Informatics, *2020*

Werner Krandick Teaching Assistant Award
Drexel University Department of Computer Science, *2019*

Service

Program Committee

- ACM Conference on Economics and Computation (EC), 2023, 2024, 2025
- Conference on Web and Internet Economics (WINE), 2023, 2024, 2025
- International Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2025
- International Joint Conference on Artificial Intelligence (IJCAI), 2025
- AAAI Conference on Artificial Intelligence (AAAI), 2025
- ACM Web Conference (WebConf), 2024, 2025
- Symposium on Algorithmic Game Theory (SAGT), 2024, 2025

Reviewer (Journals)

- Theoretical Computer Science (TCS)
- Operations Research Letters (ORL)
- Autonomous Agents and Multi-Agent Systems (IFAAMAS)
- Artificial Intelligence (AIJ)
- Journal of Economic Theory (JET)
- Operations Research (OR)
- ACM Transactions on Economics and Computation (TEAC)
- Journal of Artificial Intelligence Research (JAIR)
- SIAM Journal on Discrete Mathematics (SIDMA)

Subreviewer (Conferences)

- IARCS Foundations of Software Technology and Theoretical Computer Science (FSTTCS), 2025
- IEEE Symposium on Foundations of Computer Science (FOCS), 2025
- ACM Symposium on Theory of Computing (STOC), 2024, 2025
- ACM Web Conference (WebConf), 2023
- International Symposium on Algorithms and Computation (ISAAC), 2022
- European Symposia on Algorithms (ESA), 2022
- ACM-SIAM Symposium on Discrete Algorithms (SODA), 2022-2025

- Conference on Web and Internet Economics (WINE), 2019, 2021
- International Colloquium on Automata, Languages, and Programming (ICALP), 2021
- ACM Conference on Economics and Computation (EC), 2021
- Innovations in Theoretical Computer Science (ITCS), 2024, 2025

Organization

- Tutorials Chair - 21st Conference on Web and Internet Economics (WINE 2025)

Leadership

Drexel CCI Doctoral Student Association
President, *2020-2021*
Member At Large, *2019-2020*