Market Design Job Market Candidate Profiles 2024

Inspired by the SIGecom Exchanges' annual survey of job market candidates,[1] this is the fourth annual collection of profiles of the junior faculty job market candidates of the market design community. The eleven candidates are listed alphabetically. Along with information regarding the candidate's bio, job market paper, other representative papers, and short research summary, each profile also contains links to the candidate's homepage and CV.

We dedicate this effort in memory of all the innocents who were murdered or otherwise harmed in the terrorist attack on Israel on Oct 7, and all the innocents who were killed or otherwise harmed in its ongoing aftermath, and with the hope that all those abducted—children, women, and men—will be back home by the end of this job market season.

–Yannai A. Gonczarowski, Assaf Romm, and Ran Shorrer

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[1]Starting with: Dughmi, S., Gkatzelis, V., and Hartline, J. 2015. SIGecom job market candidate profiles 2016. *ACM SIGecom Exchanges 14,* 1, 2–40.

BILGIN, GÜNNUR EGE (Homepage, CV)

Job market paper: Decentralized Many-to-One Matching with Random Search

Advisors: Stephan Lauermann and Daniel Krähmer

Other fields: Matching theory, Political economy

PhD: University of Bonn, Economics (Expected: 2024)

Short research summary: I analyze finite many-to-one matching markets within a decentralized search and matching framework. As time gets costless, I show there might be no Markovian strategy profile that guarantees stable matchings, and unstable matchings might be guaranteed under equilibrium.

Other papers:

[1] Placement with Assignment Guarantees and Semi-Flexible Capacities, With Aygün, Orhan.

[2] Voting under Salience Bias and Strategic Extremism. With Destan, Cavit Görkem.

DEMEULEMEESTER, TOM (Homepage, CV)

Job market paper: Fair Integer Programming under Dichotomous Preferences. With Goossens, Dries, Hermans, Ben, and Leus, Roel.

Advisors: Roel Leus and Dries Goossens

Other fields: Operations research, Algorithmic game theory, Randomization

PhD: KU Leuven, Research Centre for Operations Research and Statistics (Expected: 2024)

Short research summary: I am interested in problems on the intersection of economics and computation, and have worked on topics such as matching, coalition formation and voting. I have a particular interest in settings where fairness can only be obtained by introducing randomization. In my job market paper, for example, I study how one can fairly return one of the (possibly many) optimal solutions of an integer programming formulation. As illustrated on the kidney exchange problem, the proposed algorithms significantly increase the individual fairness of the affected agents when integer programs are used to make high-impact decisions.

Other papers:

[1] A Pessimist's Approach to One-Sided Matching, *European Journal of Operational Research* (2023). With Goossens, Dries, Hermans, Ben and Leus, Roel.

[2] Rawlsian Assignments. With Pereyra, Juan S.

HAHM, DONG WOO (Homepage, CV)

Job market paper: Leveraging Uncertainties to Infer Preferences: Robust Analysis of School Choice. With Che, Yeon-Koo and He, YingHua.

Advisors: Yeon-Koo Che and Miguel Urquiola

Other fields: Economics of education, Industrial organization

PhD: Columbia University, Economics (2022)

Post-doc: University of Southern California, Economics (2022–2024)

Short research summary: I am an applied microeconomist with expertise in the fields of Economics of Education, Market Design, and Industrial Organization, with a specific emphasis on empirical school choice. I combine design-based reduced-form analysis with tools from market design and empirical IO to gain insights into students' decision-making processes throughout their academic journeys.

Other papers:

[1] A Dynamic Framework of School Choice: Effects of Middle Schools on High School Choice, *EC 2022*. With Park, Minseon.

[2] Sorting, Commuting, and School Choice, *EC 2023*. With Park, Minseon.

MASS, HELENE (Homepage, CV)

Job market paper: Optimal Testing in Disclosure Games. With Avi Lichtig.

Advisor: Achim Wambach

Other fields: Microeconomic theory, Information economics, Auction theory

PhD: University of Cologne, Economics (2018)

Post-doc: University of Bonn, Economics (2018–2024)

Short research summary: My research focues on auction theory with applications to procurement in uncertain environments and on information economics with applications in organizational economics, social learning, and disclosure games. In my JMP I derive the optimal information-gathering process for a regualtor who aims at being informed on her own but also aims at incentivizing disclosure from informed agents.

Other papers:

[1] Worst-Case Equilibria in First-Price Auctions, *Theoretical Economics* (2023). With Gretschko, Vitali.

[2] Two-Dimensional Information Acquisition in Social Learning, *Journal of Economic Theory* (2022). With Bobkova, Nina.

MONJOIE, LEOPOLD (Homepage, CV)

Job market paper: Designing Markets for Reliability with Incomplete Information

Advisor: Fabien Roques

Other fields: Environmental and ecological economics, Industrial organisation

PhD: Paris-Dauphine University, Economics (Expected: 2024)

Short research summary: My research sits at the intersection of market design and industrial organization, focusing on energy and environmental markets. My

JMP examines the challenges of allocating a good subject to capacity constraints when considering consumer preferences and investment decisions. The lack of complete information about consumer utility and constraints on the implementable mechanism implies that the optimal allocation can lead to discriminating against consumers based on their types and that discrimination depends on the level of investment considered. It has significant welfare and distributive implications, particularly in the context of the ongoing energy transition that demands substantial investments in clean technologies.

Other papers:

[1] Securing Investment for Electricity Markets. How to Design the Demand Side of Capacity Markets?

[2] Designing Efficient Capacity Mechanisms: Bidding Behavior and Product Definition

NIKZAD, AFSHIN (Homepage, CV)

Job market paper: Optimal Allocation via Waitlists: Simplicity through Information Design

Advisors: Al Roth and Itai Ashlagi

Other fields: Mechanism design, Matching markets

PhD: Stanford University, Economics (2018); Stanford University, Operations Research (2018)

Short research summary: I focus on markets where traditional approaches that leverage market-clearing prices cannot achieve social objectives such as social welfare and equality. Levers other than prices become necessary. My research provides guidelines for designing markets that achieve these objectives using the following two levers: the underlying market mechanism which determines in what way the market is cleared, and the information elicited from and provided to the participants. Broadly, I take this approach in the context of (i) improving efficiency in matching markets, and (ii) market designs for fairness and distributional equality.

Other papers:

[1] Efficiency and Equity in Dynamic Matching: Extreme Waitlist Policies, *Management Science* (2023). With Strack, Philipp.

[2] Matching in Dynamic Imbalanced Markets, *The Review of Economic Studies* (2022)

RUBBINI, GIACOMO (Homepage, CV)

Job market paper: Mechanism Design without Rational Expectations

Advisors: Roberto Serrano, Geoffroy De Clippel, Kareen Rozen, and Pedro Dal Bó

Other fields: Mechanism design, Behavioral economics, Experimental economics

PhD: Brown University, Economics (Expected: 2024)

Short research summary: I am a microeconomic theorist interested in whether classic results in mechanism design hold even when agents are boundedly rational. In my Job Market Paper, I show that incentive compatibility is still required for full implementation whenever agents can accurately predict the outcome of the implementing mechanism, even if their beliefs about their opponents' strategies are incorrect.

Other paper:

[1] The Revelation Principle without Rational Expectations

SARITAÇ, ÖMER (Homepage, CV)

Job market paper: Centralized versus Decentralized Pricing Control for Dynamic Matching Platforms

Advisor: Ali Aouad

Other fields: Design and analysis of matching algorithms

PhD: London Business School, Management Science and Operations (Expected: 2024)

Short research summary: My research focuses on the design of pricing and matching systems for service platforms within the gig economy. Through my research, I aim to: (i) design computationally efficient and practical market algorithms, and (ii) improve social welfare and equity of market outcomes. I value maintaining strong connections with the industry and adopting an application-oriented research style.

Other paper:

[1] Dynamic Stochastic Matching Under Limited Time, *Operations Research* (2022). With Aouad, Ali.

SCHLOM, CHRISTOPH (Homepage, CV)

Job market paper: Price Distribution Regulation

Advisor: Phil Reny

Other fields: Regulation, Mechanism design

PhD: Chicago Booth, Economics (Expected: 2024)

Short research summary: My job market paper studies the optimal price-based regulation of monopolists who use product quality to discriminate between consumers (Mussa-Rosen monopolists). The price distribution regulation that I study highlights an important friction when regulation is "one-sided" (i.e., only touches price or quality): namely, that a regulator cannot direct surplus to low willingness-to-pay consumer types. One surprising implication of this fact is that, when the regulator separates surplus for different consumer types, if the monopolist's participation constraint does not bind under the optimal regulation, a more equity-focused regulator will pursue a less severe regulation, which harms all consumer types and helps the monopolist.

Other papers:

[1] Regulating Platform Procurement and Self-Production

[2] Sharpening Winkler's Extreme Point Theorem, and Economic Applications

SWEAT, KURT (Homepage, CV)

Job market paper: Endogenous Priority in Centralized Matching Markets: The Design of the Heart Transplant Waitlist

Advisors: Alvin Roth, Frank Wolak, Paulo Somaini, Itai Ashlagi, and Han Hong

Other fields: Health economics, Industrial organization

PhD: Stanford University, Economics (Expected: 2024)

Short research summary: I am interested in studying market design with applications in healthcare using econometric models grounded in economic theory. My job market paper studies the usage of treatments for end-stage heart failure to assign priority in the heart transplant waitlist. I estimate doctors' preferences over treatments/transplants using administrative data. I show that patients who receive different treatments in response to priority have worse health outcomes mainly because this increases the option value of declining offers, so that these patients spend more time waiting and are more likely to die on the waitlist.

TAMURA, YUKI (Homepage, CV)

Job market paper: Obviously Strategy-proof Rules for Object Reallocation

Advisor: William Thomson

Other fields: Political economy

PhD: University of Rochester, Economics (2021)

Post-doc: New York University, Abu Dhabi (2021–2024)

Short research summary: I am interested in market design with a focus on resource allocation problems. My research agenda is to express social objectives formally, to understand their implications as completely as possible, and to design procedures that meet the objectives. In my job market paper, I study problems where resources are indivisible. I develop procedures that satisfy efficiency and fairness, and that are immune to strategic behavior in a strong sense.

Other papers:

[1] The Crawler: Three Equivalence Results for Object (Re)allocation Problems when Preferences are Single-Peaked, *Journal of Economic Theory* (2022). With Hosseini, Hadi.

[2] Object Reallocation Problems with Single-Dipped Preferences, *Games and Economic Behavior* (2023)