MERYEM ESSAIDI

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RESEARCH INTERESTS

Theoretical foundations of incentive-aware algorithms that promote fairness and social welfare in economic systems, markets, and resource allocation networks.

ACADEMIC APPOINTMENTS

Postdoctoral Researcher *2023-2025*
UC Berkeley and BIDS
Advisors: Jennifer Chayes and Christian Borgs

EDUCATION

Princeton University *2017-2023*
Ph.D. in Theoretical Computer Science
M.A. in Computer Science, 2019
Advisor: S. Matthew Weinberg

University of Pennsylvania *2012-2016*
M.S.E. and B.S.E. in Computer Science
Minors: Mathematics, Economics

SELECTED RESEARCH

Optimal Resource Allocation in Income Redistribution Networks with Christian Borgs, Jennifer Chayes, and Chris Ikeokwu. *Working paper*, *2025*.

Algorithmic Ecosystems: Optimizing in Decentralized Markets with Sam Taggart. *Working paper*, *2024*.

Credible, Strategyproof, Optimal, and Bounded Expected-Round Single-Item Auctions for All Distributions with Matheus V. X. Ferreira and S. Matthew Weinberg. *ITCS 2022*, pp. 66:1–66:19.

On Symmetries and Fairness in Multi-Dimensional Mechanism Design with S. Matthew Weinberg. *WINE 2021*, pp. 59–75.

When to Limit Market Entry under Mandatory Purchase with Kira Goldner and S. Matthew Weinberg. *MD4SG 2019*.

Predicting Startup Crowdfunding Success through Social Engagement Analysis with Qizhen Zhang, Tengyuan Ye, Shivani Agarwal, Vincent Liu, and Boon Thau Loo. *CIKM 2017*.

WORK EXPERIENCE

University of Pennsylvania, Philadelphia *2016-2017*
Research Assistant, advised by Boon Thau Loo

Google, New York City *May - Aug 2015*
SWE Intern in the Superroot Team

Google, Mountain View *May - Aug 2014*
Engineering Practicum Intern in the Local Search Team

TEACHING EXPERIENCE

Princeton University – Teaching Assistant

- COS 521: Advanced Algorithm Design (Fall 2019)
- COS 445: Economics and Computation (Spring 2019-2021)

University of Pennsylvania – Teaching Assistant

- CIS 350: Software Engineering (Spring 2016)
- CIS 262: Automata, Complexity, and Computability (Spring 2015, Fall 2015-2016)
- CIS 240: Introduction to Computer Systems (Fall 2014)
- CIS 160: Mathematical Foundations of Computer Science (Fall 2013, Spring 2014)

TECHNICAL SKILLS

Programming: Python, Java, C, OCaml, Unix/Linux
Languages: Arabic, French, English, Spanish

SERVICE

Selected Talks: ITCS 2022, Berkeley EAAMO 2022, ACM EAAMO 2021, MD4SG 2019 & 2018, WINE Lightning Talks 2020

Program Committee: EAAMO 2021-2022, MD4SG 2020

Conference Reviewer: WINE 2018-2021, ITCS 2019, ESA 2019

Co-Organizer: Princeton Research Inclusion Social Event (RISE) 2020-2023 — *Monthly discussions on diversity and inclusion in CS with faculty, postdocs, and graduate students*