
I am an operations researcher interested in the intersection of algorithms and economics. My focus is on matching and auction mechanisms, with applications in areas such as school choice, refugee resettlement, and other settings, with a goal of improving outcomes and equity in these marketplaces.

Education

<i>Sep 2022 - Present</i> New York, NY	Columbia University , Ph.D. Student in IEOR I am currently in my fourth year, studying algorithms for matching markets with and without prices, and am fortunate to be advised by Prof. Yuri Faenza and Prof. Eric Balkanski. ➤ I am supported by a Columbia University Presidential Fellowship, and a Cheung-Kong Innovation Doctoral Fellowship.
<i>Sep 2016 - May 2020</i> Cambridge, MA	Harvard University , Bachelor of Arts in Mathematics <i>Summa Cum Laude</i> , GPA: 3.97

Experience

<i>May 2025 - Aug 2025</i> New York, NY	Meta , Research Scientist Intern, Central Applied Science Designed and implemented algorithms for generative AI efficiency.
<i>Sep 2020 - Jun 2022</i> Bala Cynwyd, PA	Susquehanna International Group , Equity Options Trader Designed and implemented proprietary trading algorithms.
<i>Jan 2019 - May 2019</i> Cambridge, MA	Harvard CS124: Data Structures & Algorithms , Teaching Fellow Recitation, office hours, and grading.

Publications & Preprints

- Balkanski, E., En, C., and Faenza, Y. (2024). "An algorithm for the assignment game beyond additive valuations." *In Proceedings of the 25th ACM Conference on Economics and Computation*.
- En, C., and Faenza, Y. (2025). "Non-distributive lattices, Stable Matchings, and Linear Optimization." *In Proceedings of the International Conference on Integer Programming and Combinatorial Optimization*.
- En, C., Faenza, Y., Lodi, A., and Muñoz, G. (2025) "Fair refugee resettlement." Working manuscript.

Research

<i>Jan 2023 - Present</i> New York, NY	Yuri Faenza group Research algorithms for many-to-many matching under gross substitutes and imperfectly transferable utility; study optimization over nondistributive lattices and applications to stable matching problems.
<i>May 2019 - May 2020</i>	David Parkes group Used novel GAN framework to disprove revenue monotonicity in optimal auctions.
<i>Sep 2018 - May 2020</i>	Harvard Asian American Dance Troupe Developed fair dance assignment system based on Approximate Competitive Equilibrium from Equal Incomes mechanism.
<i>Jan 2019 - May 2019</i>	Harvard APMTH221 Showed impossibility of fair Congressional districts in Massachusetts under all existing gerrymandering metrics.

Relevant Coursework

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| - Market Design (Fall 2024) | - Analysis of Networks and Crowds (Fall 2022) |
| - Analysis of Algorithms (Fall 2022 / Fall 2023) | - Economics & Computation (Spring 2020) |
| - Revenue & Supply Chain Mgmt (Spring 2023) | - Combinatorics (Spring 2019) |
| - Optimization (Fall 2022 / Spring 2023) | - Technology & Ethics (Fall 2019) |
| - Stochastic Modeling (Fall 2022 / Spring 2023) | - Machine Learning (Spring 2018) |

Awards & Honors

<i>Aug 2024 - Present</i>	Cheung-Kong Innovation Doctoral Fellowship
<i>Sep 2022 - Present</i>	Columbia University Presidential Fellowship
<i>May 2020</i>	Harvard Phi Beta Kappa