

OLIVIA FRANCES EDWARDS

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EDUCATION

Texas A&M University

Expected 2026

3rd Year Ph.D. Student in Economics

Research Interests: Industrial Organization, Public Finance

Millsaps College

2017-2021

BS in Economics, Minor in Mathematics & Data Analytics

Phi Beta Kappa

PUBLICATIONS

Lattice Configurations Determining Few Distances

2020

Integers Volume 20 (with Balaji et al)

We begin by revisiting a paper of Erdos and Fishburn, which posed the following question: given $k \in \mathbb{N}$, what is the maximum number of points in a plane that determine at most k distinct distances, and can such optimal configurations be classified? We rigorously verify claims made in remarks in that paper, including the fact that the vertices of a regular polygon, with or without an additional point at the center, cannot form an optimal configuration for any $k \geq 7$. Further, we investigate configurations in both triangular and rectangular lattices studied by Erdos and Fishburn. We collect a large amount of data related to these and other configurations, some of which correct errors in the original paper, and we use that data and additional analysis to provide explanations and make conjectures.

Sets in \mathbb{R}^d Determining K Taxicab Distances

2019

Involve Volume 13, No. 2 (with Balaji et al)

We address an analog of a problem introduced by Erdos and Fishburn, itself an inverse formulation of the famous Erdos distance problem, in which the usual Euclidean distance is replaced with the metric induced by the ℓ^1 -norm, commonly referred to as the taxicab metric. Specifically, we investigate the following question: given $d, k \in \mathbb{N}$, what is the maximum size of a subset of \mathbb{R}^d that determines at most k distinct taxicab distances, and can all such optimal arrangements be classified? We completely resolve the question in dimension $d = 2$, as well as the $k = 1$ case in dimension $d = 3$, and we also provide a full resolution in the general case under an additional hypothesis.

WORKING PAPERS

School Choice and Charter Market Power: An Analysis of Charter School Management Organization Merger and Acquisitions

2023

Drawing upon the traditional Industrial Organization (IO) framework, the analysis focuses on identifying the factors influencing CMO M&A decisions, the patterns of consolidation, and the effects on educational outcomes and organizational efficiency. The findings reveal that CMO mergers and acquisitions are primarily driven by the pursuit of economies of scale, improved operational efficiency, and expanded geographic reach. Additionally, strategic considerations such as market dominance, resource pooling, and increased bargaining power play significant roles in shaping these transactions. The empirical analysis showcases how CMO consolidation impacts student performance, teacher retention, and overall educational quality.

Evaluating the Effects of and Parental Preferences for Special Education

2023

(with Melissa Gentry)

Employing an oversubscribed lottery-IV identification strategy, we examine the effects of attending these specialized charter schools on various educational outcomes for students with special education (SPED) needs. Additionally, we investigate treatment effect heterogeneity by exploring the impact of different instructional styles within these schools. We explore the alignment between parental preferences and the effectiveness of instructional approaches in catering to the needs of SPED students. By examining the results from the oversubscribed lottery-IV identification, we are able to identify the causal effects of attending SPED-oriented charter schools on academic achievement, social-emotional development, and other key outcomes. Moreover, we delve into parental preferences for SPED educational settings through the application of a structural demand model. This analysis enables us to assess whether parental preferences align with the reduced-form evidence on instructional effectiveness for SPED students. By comparing parental preferences with the outcomes observed in the oversubscribed lottery-IV identification, we gain insights into potential misalignments and areas of improvement in meeting the needs of SPED students.

WORKS IN PROGRESS

Minimum Wage and Monopsony: Evaluating the Employment Effects Across Time and Industry

2023

(with Jonathan Meer and Jeremy West)

Charter Management Organizations: Pay no attention to that man behind the curtain

2023

TEACHING EXPERIENCE

ECON 285: First-Year Experience

Fall 2023

Instructor at Texas A&M

ECON 202: Principles of Microeconomics

Spring 2022 - present

Teaching Assistant for Dr. Jonathan Meer at Texas A&M

ECON 328: Economics of Education

Spring 2022, Fall 2023

Teaching Assistant for Dr. Jonathan Meer at Texas A&M

ECON 100: Principles of Economics

2020 - 2021

Teaching Assistant for Dr. Patrick Taylor at Millsaps College

OTHER EXPERIENCE

Research Assistant

Dr. Jonathan Meer, Texas A&M

Summer 2022, 2023

Dr. Steve Puller, Texas A&M

Fall 2021

Dr. Blakely Fender, Millsaps College

2019 - 2021

Dr. Alex Rice, Millsaps College (Dept. of Mathematics)

2019 - 2020

Pre-K3 Teacher

2017 - 2019, Summer 2021

St. Martin's School; New Orleans, LA

Congressional Intern

Summer 2020

House of Representatives; Washington D.C.

CONFERENCES AND WORKSHOPS

2023: ASSA Annual Meeting, Southern Economic Association Meeting
2022: Texas A&M Public/Labor Workshop
2020: Academy of Business Research (presenter), Tri-Beta Symposium (presenter)

PROFESSIONAL ACTIVITIES

1st-Year Ph.D. Student Mentor, Texas A&M	<i>2022 - present</i>
Undergraduate Research Advisor, Texas A&M	<i>2022 - present</i>

AWARDS AND HONORS

Lechner Liberal Arts Scholarship, Texas A&M	<i>2021-2022</i>
Most Outstanding Economics Graduate, Millsaps College	<i>2021</i>
Most Outstanding Else Business School Graduate, Millsaps College	<i>2021</i>
Woman of the Year, Millsaps College	<i>2021</i>
Women in Democracy Fellow, Mississippi Legislature	<i>2020</i>
Pi Mu Epsilon, Millsaps College	<i>2020</i>
Omicron Delta Kappa, Millsaps College	<i>2020</i>
Omicron Delta Epsilon, Millsaps College	<i>2019</i>

SKILLS & INTERESTS

Programming Languages	R (advanced), Python (beginner), Matlab (beginner), Stata (introductory)
Software & Tools	Git, LaTeX, AI Prompt Engineering, Tableau
Interests	Painting, Running, Ballet

Last Updated: May 2023