

# Rayyan Saad Mobarak

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## EDUCATION

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University of Maryland, College Park, Ph.D. in Agricultural and Resource Economics  
Macalester College, B.A in Economics and Applied Mathematics & Statistics

exp. May 2028  
May 2021

## PEER-REVIEWED PUBLICATIONS

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Katherine L. Milkman, Sean F. Ellis, Dena M. Gromet, Youngwoo Jung, Alex S. Luscher, **Rayyan S. Mobarak**, Madeline K. Paxson, Ramon A. Silvera Zumaran, Robert Kuan, Ron Berman, Neil A. Lewis Jr., John A. List, Mitesh S. Patel, Christophe Van den Bulte, Kevin G. Volpp, Maryann V. Beauvais, Jonathon K. Bellows, Cheryl A. Marandola, Angela L. Duckworth. “**How Do Free Rides and Text Reminders Affect COVID-19 Vaccinations? A 3.66-Million Person Megastudy.**” *Nature* (2024). <https://doi.org/10.1038/s41586-024-07591-x>

Kai Ruggeri, David G. Rand, Eli J. Finkel, Michele Gelfand, Alia Crum, Cass R. Sunstein, Jay J. Van Bavel, Robb Willer, Katherine L. Milkman, ... **Rayyan S. Mobarak**, et al. “**A synthesis of evidence for policy from behavioural science during COVID-19.**” *Nature* (2023). <https://doi.org/10.1038/s41586-023-06840-9>

Katherine L. Milkman, Linnea Gandhi, Sean F. Ellis, Heather N. Graci, Dena M. Gromet, **Rayyan S. Mobarak**, Allison M. Bутtenheim, Angela L. Duckworth, Devin Pope, Ala Stanford, Richard Thaler & Kevin G. Volpp. “**A citywide experiment testing the impact of geographically targeted, high-pay-off vaccine lotteries.**” *Nature Human Behaviour* (2022). <https://doi.org/10.1038/s41562-022-01437-0>

## WORKING PAPERS

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Katherine L. Milkman, Sean F. Ellis, Dena M. Gromet, Isabella M. DeMay, Heather N. Graci, Youngwoo Jung, **Rayyan S. Mobarak**, Ramon A. Silvera Zumaran, Mia N. Simmons, Christophe Van den Bulte, Shlomo Benartzi, Matthew Hilchey, Laura Goodyear, Dean Karlan, Nina Mazar, Daniel Mochon, Avni M. Shah, Dilip Soman, Jonathan Zinman, Angela L. Duckworth. “**Can Reminder Emails Compel Americans to Save? A Two-Million Person Megastudy.**” *R&R at PNAS Nexus*.

## RESEARCH APPOINTMENTS

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### University of Maryland

Aug 2023 – Aug 2024

*Research Assistant, Department of Agricultural and Resource Economics*

- Assisted Prof. Lars Olson estimate demand functions for marine resource imports under international trade
- Collected, summarized, and visualized large trade datasets

### The Wharton School, University of Pennsylvania

Jun 2021 – Jul 2023

*Pre-Doctoral Fellow, Behavior Change for Good Initiative*

- Coauthored, alongside a multidisciplinary team of scientists, three papers that implement and analyze:
  - A city-wide geographically-targeted lottery, incentivizing adult first-dose COVID-19 vaccination rates
  - An RCT nudging customers of a large U.S. bank to increase savings account transfers, and
  - An RCT incentivizing and nudging eligible individuals to take the COVID-19 booster
- Designed large-scale field experiments and provided statistical tools needed for analysis
- Performed all data management and econometric analysis for each project
- Led journal submissions and responded to reviewer comments

## University of Minnesota

Oct 2019 – Aug 2020

*Research Assistant, Department of Applied Economics*

- Assisted Prof. Paul Glewwe with two papers:
  - An RCT impacting educational outcomes through teacher training programs within Nepal, and
  - A study of factors behind the strong academic performance of 15-year-olds in Vietnam
- Conducted literature reviews, proofread reports, and formatted tables of regression output

## TEACHING EXPERIENCE

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### University of Maryland

Aug 2025 – present

*Guest Instructor, Harvesting Big Data to Examine Agriculture (Undergraduate Course)*

- Teach students R programming and data science skills to analyze large tabular and geospatial data
- Collect and prepare agriculture and climate datasets for use by students in homework and in-class exercises

### University of Maryland

Jan 2025 – Aug 2025

*Teaching Assistant, Microeconomic Analysis II (Ph.D. Core Course)*

- Instructed students on general equilibrium models, welfare theorems, uncertainty, and asymmetric information
- Conducted weekly discussion sessions, to solve past exam questions in preparation for course exams

### University of Maryland

Aug 2024 – present

*Teaching Assistant, Optimization in Agricultural and Resource Economics (Ph.D. Core Course)*

- Assist students on optimization, fixed point theorems, optimal control theory, and dynamic programming
- Solve problem sets in weekly discussion solutions and grade student solutions

## AWARDS AND GRANTS

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**University of Maryland Dean's Fellowship (\$2500)**

Aug 2025

**Macalester Summer Internship Grant (\$2500)**

Jun 2020

**Kofi Annan Scholarship (\$100,000)**

Aug 2017- May 2021

## ACADEMIC SERVICE

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**Referee for Energy Economics**

**President for Association of Agricultural and Resource Economists at UMD**

May 2025 - present

**Graduate Representative for Department of Agricultural Resource Economics**

May 2025 - present

**Mentor and Panelist for Pathways to Research and Doctoral Careers ([PREDOC](#))**

Jun 2022

## TECHNICAL SKILLS

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*Languages:* Stata (advanced), R (advanced), Python (intermediate), SAS (beginner)

*Other:* LaTeX, Qualtrics, HTML & CSS