

AARON GRAYBILL

(+1) 215-589-3887
aarongraybill12@gmail.com
<https://aarongraybill.com>

EDUCATION	University of Pennsylvania <i>Ad hoc coursework</i>	Philadelphia, PA, USA 2023–2024
	<ul style="list-style-type: none">• Relevant Coursework: Ph.D. Microeconomics, Algorithmic Game Theory	
	Haverford College <i>B.A. in Economics and Mathematics</i>	Haverford, PA, USA 2018–2022
	<ul style="list-style-type: none">• Relevant Economics Coursework: Advanced Microeconomics, Mathematical Economics, Quantitative Economics, Thesis• Relevant Math Coursework: Analysis, Linear Algebra, Stochastic and Numerical Methods, Quantitative Finance, Probability, Applied Multivariate Statistical Analysis	
PROFESSIONAL EXPERIENCE	Research Analyst, Federal Reserve Bank of Philadelphia Philadelphia, PA, USA	Jun. 2022–Present
	<ul style="list-style-type: none">• Developed novel methodology to uniquely identify homeowners between properties using co-ownership record and mailing address history• Leveraged concepts from network theory and linear algebra to convert methodology into optimized algorithms• Authored more than 5,000 lines of R and SQL code to apply algorithms to hundreds of gigabytes of property-level tax assessment and transaction data• Created new spatial data to measure how fragmentation of parcel use types affects long-term housing development• Automated chart production in Python for Monetary Policy briefings• Modernized internal data collection and processing by scraping available data, removing reliance on 3rd party vendors	
	Volunteer Alumnus Teaching Assistant, Haverford College Haverford, PA, USA	Jan. 2023–May 2023
	<ul style="list-style-type: none">• Lead problem solving sessions for Advanced Microeconomics, the terminal microeconomics course• Adapted to student needs, teaching concepts from probability theory, calculus, and intermediate microeconomics	
	Research Intern, Federal Reserve Bank of Philadelphia Philadelphia, PA, USA	Jun. 2020–May 2022
	<ul style="list-style-type: none">• Analyzed survey results from the Manufacturing Business Outlook Survey for the publication of monthly reports about the local business climate• Generated a dashboard of statistics and charts on COVID-19's economic impacts	
	Teaching Assistant, Haverford College Haverford, PA, USA	Sep. 2021–Dec. 2021
	<ul style="list-style-type: none">• Answered student questions about econometrics• Graded problem sets and provided constructive commentary	
AWARDS AND HONORS	<ul style="list-style-type: none">• Michael M. Weinstein Prize in Economics, Haverford College	May 2022
	For having made the greatest overall contribution to departmental life. Awarded for contributions in class, with peers, and for starting the widely used Economics Question Center.	
	<ul style="list-style-type: none">• Runner-Up, Holland Hunter Thesis Prize, Haverford College	May 2022
	For outstanding senior theses in economics. One of three selected as finalists for the award.	
SKILLS	Programming: R, Python, SQL, Terminal (Bash, PowerShell), Julia, Stata, Matlab.	
	Technical: git (GitHub/GitLab), Apache Hadoop, T _E X.	