Aaron Graybill
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Education:

Haverford College, B.A. in Economics & Mathematics: May 2022 (Magna Cum Laude)
Economics (High Honors, 3.98 GPA), Mathematics (3.88 GPA), Cumulative GPA: 3.86
Relevant coursework:
Mathematical Economics, Real Analysis, Linear Algebra, Stochastic and Numerical Methods, Probability Theory, Advanced Microeconomics, Quantitative Finance, Econometrics, Differential Equations, Linear Optimization, Algebra
Awards:
Recipient: Michael M. Weinstein Prize in Economics
Runner up: Holland Hunter 1943 Economics Department Thesis Prize
Thesis: "Exposure Doesn't Pay the Bills: Artistic Production on Streaming Platforms Under Algorithmically-Induced Audience Uncertainty", link

Work Experience:

Senior Research Assistant, Federal Reserve Bank of Philadelphia   June 2022– Present
- 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 code to apply algorithms to hundreds of gigabytes of property-level tax assessment and transaction data
- Automated chart production for Monetary Policy briefings
- Modernized internal data collection and processing by scraping available data, removing reliance on 3rd party vendors

Research Intern, Federal Reserve Bank of Philadelphia   June 2020–June 2022
- Analyzed survey results from the Manufacturing Business Outlook Survey for publication of monthly reports about the local business climate
- Generated a dashboard of statistics and charts for COVID-19's economic impacts

Economics Question Center Staff and Peer Tutor, Haverford College   January 2020–May 2022
- Answered student questions about the mathematical and economic skills necessary to complete problems
- Facilitated collaboration between students to discover answers together

Additional Experience:

Teaching Assistant, Advanced Microeconomics, Haverford College   January 2023–May 2023
- Lead problem solving sessions for Advanced Microeconomics, the terminal microeconomics class at Haverford
- Adapted to student needs, teaching concepts as from probability theory, calculus, and intermediate microeconomics

Co-president, 180 Degrees Consulting, Haverford College   January 2020–May 2022
- Managed a group of ten consultants and ensured the quality of consulting services to local nonprofits
- Oversaw four successful consulting projects in which we provided methods to increasing donations, mobilized donor demographic data, provided feedback for unsuccessful projects, and redesigned our client's website
- Provided constructive criticism on consultants' work to improve content and clarity

Technical Skills:
R, Python, Julia, Stata, MATLAB, SQL, Apache Spark, git