PETER PRASTAKOS

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EDUCATION

Massachusetts Institute of Technology (MIT), Cambridge, MA

Ph.D. in Operations Research, Advisor: Prof. Rahul Mazumder, GPA: 5.00/5.00

New York University, Courant Institute of Mathematical Sciences, New York, NY

Sep 2021 – May 2022

Sep 2023 – Present

Non-Degree Graduate Coursework in Mathematics (fully funded by the Federal Reserve Bank of New York), GPA: 4.00/4.00 Relevant Coursework: Algebraic Topology 1, Advanced Topics in Numerical Analysis: Convex and Nonsmooth Optimization

Yale University, New Haven, CT

Sep 2017 - May 2021

B.S. in Applied Mathematics (concentration in Computer Science), Economics, GPA: 3.91/4.00, Honors and Distinction in both majors Relevant Coursework: Functional Analysis*, Ergodic Theory*, Measure-Theoretic Probability*, General Equilibrium Theory*, Abstract Algebra, Game Theory (intensive), Algorithmic Game Theory, Applied Data Mining and Machine Learning, Discrete Mathematics, Real Analysis, Algorithms, Vector Analysis, Data Structures, Artificial Intelligence, Bayesian Probability and Statistics, Ordinary & Partial Differential Equations, Linear Algebra, Monetary Policy, Capital Markets, Financial Theory *Graduate courses Senior Thesis: "Social Distancing and the SIR Model with Temporary Immunity"

Awards: Yale First-Year Summer Fellowship for Research in the Sciences and Engineering, Schulz Research Fellowship in the Physical Sciences, National Panhellenic Merit-Based Scholarship, Princeton Environmental Ideathon -2^{nd} place

Tenafly High School, Tenafly, NJ

Jun 2017

Valedictorian, GPA: 4.73/4.00

Awards: National Finalist in 2016 US Chemistry Olympiad; Columbia University Science Honors Program; National AP Scholar

WORK EXPERIENCE AND RESEARCH

Federal Reserve Bank of New York, Senior Research Analyst, New York, NY

Jul 2021 - Jul 2023

- Statistical analysis, data cleaning, and modelling for numerous research and policy projects in the Department of Banking Studies under Department Head Gara Afonso, and Financial Economists Hyeyoon Jung and Lee Seltzer
- Selected projects include (a) estimating the demand curve for bank reserves during 2010-2021 using a time-varying VAR model (MATLAB), (b) analyzing the strategic complementarity of banks in the Fedwire payment system (Stata), (c) studying the effect of climate regulatory risks on corporate bonds using a Black-Scholes-type pricing model (MATLAB), (d) coauthoring a blog post published in Liberty Street Economics regarding the effect of the Federal Reserve's two main rates for implementing monetary policy, the IORB and ON RRP rates, on the federal funds rate distribution (Stata); notable project collaborators include Dr. John Williams (NY Fed President), Dr. Hyun Song Shin (Bank of International Settlements), and Dr. Darrell Duffie (Stanford GSB)
- Earned the NY Fed Vault Propel Award twice and the Vault Soar Award for exemplary performance from senior management

NYU Courant Institute of Mathematical Sciences, Graduate Teaching Assistant, New York, NY

Sep 2021 – Dec 2021

Led weekly recitation, held office hours, and graded exams for MATH-UA.325: Analysis

Yale Center for Teaching and Learning, Undergraduate Teaching Assistant/Grader, New Haven, CT

Sep 2018 – May 2021

• Undergraduate TA/Grader for the following 11 courses starting sophomore year (2 courses per semester):

MATH 120: Multivariable Calculus (Grader w/ Prof. Orosz; F'18) | ECON 115: Introductory Microeconomics (TA w/ Profs.

Goldberg, Oster, and O'Dea; F'18, S'19) | ENAS 151: Multivariable Calculus for Engineers (TA w/ Prof. Bennett; S'19) | ECON

122: Intermediate Macroeconomics (TA w/ Prof. Peters; F'19) | CPSC 223: Data Structures and Programming Techniques

(TA/Grader w/ Prof. Glenn; F'19) | CPSC 202: Mathematical Tools for Computer Science (TA w/ Prof. Bridy; S'20) | MATH

222: Linear Algebra with Applications (Grader w/ Prof. Vandenboom; S'20) | MATH 244: Discrete Mathematics (TA w/ Prof.

Pohoata; F'20) | MATH 250: Vector Analysis (Grader w/ Prof. Neitzke; F'20) | MATH 300: Topics in Analysis (Sole Grader w/

Prof. Velozo; S'21) | CPSC 365: Algorithms (TA/Grader w/ Prof. Glenn; S'21)

Federal Reserve Bank of New York, Summer Analyst – Research Group, New York, NY

Jun 2020 – Aug 2020

• Worked in the Financial Intermediation function under Dr. Nicola Cetorelli (Vice President and Function Head) and Dr. Gara Afonso (Assistant Vice President) on analyzing (a) the flow-performance relation of bank loan mutual funds, and (b) the behavior of liquidity shocks in a digital currency environment

Accenture, Database Management/Software Engineering Intern, Athens, Greece

Jun 2019 – Jul 2019

- Worked on the enterprise data warehouse (EDW) team at the National Bank of Greece
- Designed the functional specifications for multiple search queries to feed the SAP BW with data from the EDW
- Significantly reduced the time required to feed data from the EDW to the Customer Analytics sector of the bank by restructuring the tables and building queries that dynamically update the table contents to preserve storage based on the bank's specifications
- Technologies used: SQL Server and Microsoft Visual Studio

SKILLS

Languages: Greek (native); English, French (fluent)

Computer programming: C, Python, MATLAB, Stata, LaTeX (advanced); R, C++, SQL (intermediate); Java (beginner)