# Gevorg Khandamiryan

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Education

# University of California, Berkeley

PhD in Economics

• Microeconomic Theory, Behavioral Economics, Labor Economics, Network Theory

#### University of Oxford

MPhil in Economics

- Alumni Graduate Scholarship Award, Pembroke College
- Coursework: Advanced Microeconomics, Game Theory and Mechanism Design, Econometrics, Behavioral Economics, Machine Learning, Industrial Organization, Macroeconomics

# University of California, Berkeley

BA with Distinction in Applied Mathematics (in Data Science), BA with Honors in Economics Aug 2016 – May 2020

• Coursework: Honors Linear Algebra and Differential Equations, Discrete Mathematics, Real, Complex and Numerical Analysis, Combinatorics, Optimization, Advanced Microeconomic Theory, Advanced Macroeconomics, Mathematical Economics, Intermediate Financial Economics, Econometric Theory, Probability and Statistics

# Experience

#### **Charles River Associates**

Consulting Associate

- Developing theoretical and econometric damage estimation methodology to assess harms from anticompetitive conducts in digital advertising markets
- Managing scripts in STATA, Python, analyzing cloud computing and pharmaceutical markets from antitrust, dominance abuse, cartel and collusion perspectives
- Economic advising on merger and acquisition cases (Adobe Figma)

#### **Oxford Economics**

*Economist* 

- Performed econometric modeling, model selection, choice modeling, inference and forecasting across 4 projects
- Started a new subscription-based product and established its data pipelines, utilizing deep learning based named entity recognition, bidirectional LSTM and latent Dirichlet allocation models to analyze sustainability and construction reports and to extract environmental and investment data from these
- Used Monte Carlo simulations for inflationary and consumer spending forecasts

Berkeley, CA Aug 2023 -

Oxford, UK Sep 2020 - June 2022

Berkeley, CA

Aug 2022 – Jul 2023 London. UK

Jul 2021 – Oct 2021

London, UK

# University of Oxford

Research Assistant

- Scraped and collected text database, developed natural language processing models on these to explain regional and seasonal variations of patients' sentiment towards and their interactions with healthcare providers on NHS platforms before and after lockdowns
- Worked on a project studying differences in health outcomes among the male population in Italy, with treatment group exposed to a mandatory military service and regular comprehensive medical scrutiny and the control group being born after 1986 with no army duty and no systematic medical checkups, concluded lower prevalence of cardiovascular diseases and hospital admissions among the first group
- Worked on a joint paper studying differences in mental health and antibiotic prescription prevalence based on health labor force diversity (gender, immigration status, origin of medical qualification)

# University of California, Berkeley

Research Assistant

- Created a new income tax progressivity measure from marginal tax rates and adjusted income brackets to scale for country differences in magnitude of income
- Used mixed splicing techniques to combine data from multiple sources and created dynamic econometric model to evaluate tax policy impact on inequality level, measured by GINI
- Measured the impact of flat taxation policies on GINI, constructed impulse response functions
- Concluded that as the country switches from progressive system to a flat tax system, its inequality level as measured by GINI is significantly increased, emphasizing that the main beneficiaries of the flat tax policy are the top earners. Yet, this effect is completely reversed in 4 of the 9 flat tax countries analyzed in subsequent years, which can be explained by more generous social assistance packages backed by increased tax revenues
- The part of study earned honors distinction as part of my undergraduate thesis and is annually presented at data science course Data88 at Berkeley as the best thesis with application of data science in economics

# Teaching

University of California, Berkeley	Aug 2023 –
Graduate Student Instructor	Berkeley, CA
• Teaching Assistant for Professor Jim Campbell for the Introduction to Economics course	

# University of California, Berkeley

Undergraduate Student Instructor

- Teaching Assistant for Professors Enrico Moretti and Martha Olney for the Introduction to Economics course
- Led 2 discussion sections of 30 students each, for 3 semesters, facilitating active discussion of practice problems, proctoring exams, holding office hours and evaluating weekly problem sets, projects, essays and exams
- Received an instructor evaluation mean score of 6.4/7 (department average is 5.7)

# Working Papers

#### University of Oxford | Department of Economics

- Reputation Effects in Repeated Games with Learning, MPhil Thesis, 2022
- GP Practice Online Reviews before and after the COVID-19 Pandemic (with C. Nicodemo, J. Powell and J. Vidiella-Martin), R&R Journal of Medical Internet Research, 2022

Jul 2019 – May 2020

Jan 2019 – May 2020

Berkeley, CA

Berkeley, CA

#### University of California, Berkeley | Department of Economics

- Analyzing the Relationship between Personal Income Tax Progressivity and Income Inequality, Senior Honors Thesis, 2020
- Drinking Habits and Culturally Conditioned Wine Production in Italy (with Manana Hakobyan), 2019

#### **Independent Projects and Data**

- *City livelihood index:* a database that contains walking and driving distances, times and traffic data between randomly generated google map queries of basic-necessity locations, such as grocery stores, housing, workplace and entertainment. Useful with implications in urban planning and political science, including voting and political participation trends
- Simulated entry deterrence repeated game database: network-based Bayesian learning and belief updating model that allows a monopolist to deter entry in the initial stages of the game. Datasets contain simulated chronological entries of market challengers by network length, edge distribution, transmission function and other features
- *Like my neighbor:* satellite image data of rooftops of selected cities. Developing convolutional network to recognize and quantify color-discrepancies in residential rooftops that can prove useful for modeling neighbor effects, educational choices, political and voting outcomes

# Leadership

#### DataPoint Armenia | Co-founder

- Co-founded a 501(c)(3) nonprofit that fosters the development and implementation of data science in developing regions and rural areas by offering educational, mentoring and networking opportunities for free
- Supported dozens of talented women from rural areas of Armenia to pursue data science career

# Awards and Grants

- Alumni Graduate Scholarship Award for Excellence, Pembroke College, University of Oxford, 2021
- AGBU Scholarship Grant for Excellence to study at the University of Oxford, New York City, 2020 2022
- My Step Government Scholarship Grant to study at the University of Oxford, Armenia, 2020 2022
- Graduate Merit Award, Full Scholarship and Stipend, University of Bocconi, 2020 2022
- Honors distinction in Economics upon graduation, UC Berkeley, 2020
- Distinction in Mathematics upon graduation, UC Berkeley, 2020
- Luys Government Scholarship Grant for Excellence to study at UC Berkeley, 2016 2020
- Margarian Law Firm Scholarship to study at UC Berkeley, 2017
- Golden Medal of Excellence, Presidential Award, Yerevan, Armenia, 2016
- Best student in STEM, Presidential Award, Yerevan, Armenia, 2016
- Third Prize in Mathematics National Olympiad, IMO selection team participant, Armenia, 2014, 2015
- Second Prize in International HSE Mathematics Olympiad, Moscow, Russia, 2015

#### Technical and other Skills

Languages: English (proficient), Russian (proficient), Armenian (native) Programming Languages: Python, STATA, R, Matlab, IAT<sub>E</sub>X Developer Tools: Figma