

MATT DELVENTHAL

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EXPERIENCE

- 2024- Assistant Professor of the Practice (part time), University of Southern California
- **Taught** introductory master's-level course in Macroeconomics
- 2023- Senior Data Scientist, CoreLogic
- **Led** exploratory Natural Language Processing (NLP) projects as member of R&D team
 - **Created** proof of concept using sentiment analysis of news data using BERT model
 - **Developed** major upgrade of forecasting model for industry standard home price index (
 - **Designed** Python module to evaluate gen-AI/Large Language Model (LLM) performance
- 2022-23 Data Scientist, Art of Problem Solving
- **Broke ground** as first dedicated data analyst for a major e-learning product
 - **Instigated** development of improved company-wide analytics and reporting system
 - **Evaluated impact** of major product changes using difference-in-difference estimation
- 2018-22 Assistant Professor of Economics, Claremont McKenna College
- **Managed** 6 simultaneous in-depth research projects:
 - ▶ **Trained and supervised** 12 research assistants
 - ▶ **Recognized** for analysis of remote work: [\[PUBLICATION\]](#) [\[CONFERENCE\]](#) [\[INTERACTIVE APP\]](#)
 - ▶ **Won** 4 research grants totaling \$168k
 - ▶ **Media coverage:** [LA Times](#), [Time Magazine](#), [The Economist](#), others
 - **Taught** courses: Spatial data analysis; Analysis of price and wage data; Causal inference
 - **Presented** research to academic and non-academic audiences
 - ▶ 40+ scholarly presentations, including at Brown U., Natl. Bureau of Economic Research, U. of Pennsylvania, Minneapolis Fed, Philadelphia Fed., UC San Diego.
- 2013-17 Research Assistant, MOVE, UAB
- **Built** database of birth/death stats for 188 countries over 500+ years
 - **Created** method to **measure + analyze** global demographic transitions [\[INTERACTIVE APP\]](#)
- 2011-12 Human Capital Analyst, ICF International
- **Developed** analysis tool to optimize across 57 IT systems for U.S. Navy.
 - **Overhauled** financial reporting for a U.S. Air Force project worth \$7 mil/year.
- 2005-09 Psychological Operations Sergeant, U.S. Army
- **Designed experiments** to pre-test Arabic-language radio and TV ads
 - **Interpreted** regular meetings between U.S. and Iraqi officials
- 2004-05 Business English Teacher, Intl. Communication Institute, Guadalajara, Mexico

EDUCATION

Ph.D. in Economics, Universitat Autònoma de Barcelona, 2018

M.A. in Economics, Universitat Autònoma de Barcelona, 2014

B.S. in Economics, University of Missouri-Saint Louis, 2010

SKILLS

Software: GCP, AWS, SQL, SciPy, Pandas, OSMnx, Beautiful Soup, PyDeck, Altair, QGIS

Methods: Linear + logistic regression, Monte-Carlo sim, DiD estimation, SVM, VAR

Languages: English, Arabic, Spanish, Catalan