Adam Baybutt

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Education

2018-2023	PHD in Economics, UCLA
	Thesis Title: Essays in High-Dimensional Econometrics and Empirical Crypto Asset Pricing
	Committee: Denis Chetverikov (chair), Valentin Haddad, Andres Santos, Pierre-Olivier Weill
2018-2020	MA in Economics: Econometrics and Asset Pricing, UCLA
2016-2017	Advanced Study Program, Massachusetts Institute of Technology (MIT)
2011-2012	MS in Biomedical Engineering: Neuroengineering, University of Southern California (USC)
2011	Semester Abroad in Bioengineering, National University of Singapore
2008-2012	BS in Biomedical Engineering, minor in Business, USC

Research

JOB MARKET PAPER

Empirical Crypto Asset Pricing with High-Dimensional Factor Models (Code)
· Study the dynamics of crypto asset returns through the lens of factor models.
· Build a panel of crypto assets returns with a novel set of asset characteristics (e.g. social, onchain, etc.).
· Present a set of motivating empirical facts, e.g. a risk portfolio's Sharpe gains from diversifying to crypto.
· Present low-dimensional factor model's out-of-sample pricing performance in a weekly panel,
i.e. univariate factors, multivariate factor model, PCA, and IPCA.
· Develop novel econometric theory of a high-dimensional dynamic latent factor model.
· Apply the novel factor model to estimate the inflation risk premium of crypto.
· Present economically significant out-of-sample returns of a novel deep learning-based factor model.

WORKING PAPERS

Model Assisted Inference for Conditional Average Treatment Effects with High Dimensional Controls (w/ Manu Navjeevan)

IN-PROGRESS

Competing Fiat Moneys and Nominal Rigidities (w/ Basil Halperin and J. Zachary Mazlish)
Monetary policy, asset prices, credit, and the real economy (w/ Jesper Bojeryd)

Professional Experience

Employment

2022	**Quantitative Researcher, Krypton Protocol**
	· Researched trading costs in decentralized exchanges (DEXs) using Uniswap and CEX trade-level data.
	· Built simulations of optimal market-making strategies in Krypton's novel DEX setting.
2021	**PhD Summer Intern in Investment Strategy, Dimensional Fund Advisors**
	· Built machine learning models (e.g. GBDT, neural nets) to inform investment strategy research.
2019	**Research Fellow, Y Combinator Research**
	· Collaborated with Sam Altman to articulate directions for crypto research and startups.
	· Consulted on a randomized controlled trial (RCT) of US-based basic income policy.
2016-2018	**Research Associate, MIT**
	· Built GBDT models in Medicare data. RA for QJE by Obermeyer and Mullainathan.
	· Analyzed healthcare delivery RCTs led by Kate Baicker (JAMA) and Amy Finkelstein (NEJM).
2015-2016	**Biostatistician, Cepheid**
	· Designed and analyzed molecular diagnostic clinical trials for (FDA) regulatory registration.
2014-2015	**Program Manager, Cepheid**
	· Led and managed product development teams for oncology molecular diagnostics.
2012	**Engineering Co-Op, Abbott Laboratories – Abbott Medical Optics**
2012	**Engineering Intern, Abbott Laboratories**

Affiliations

2020-2021	Research Scholder, Ziman Center for Real Estate, UCLA
2011	The BioRC Biomimetic Real-time Cortex Project, Undergraduate Researcher, USC
2010	Undergraduate Research Engineer, Center for Neural Engineering, USC
2010	Summer Research Intern, Medical Device and Development Facility, USC

Teaching

2019-2023	**Teaching Fellow, UCLA**
	· Probability and Statistics for Econometrics (PhD)
	· Machine Learning and Big Data for Economists (Masters)
	· Exchange Rate Forecasting, Big Data, and Portfolio Design (Masters) (x2)
	· Machine Learning (Masters)
	· Computational Finance and Data Analysis for Financial Engineering (Undergraduate)
	· Introduction to Econometrics (Undergraduate) (x4)
	· Investments (Undergraduate)
	· Probability and Statistics for Economists (Undergraduate)
	· Intermediate Microeconomics (Undergraduate)
2018-2021	**Course Leader, Emeritus Institute of Management**
	· Applied Artificial Intelligence, Columbia University
	· Applied Machine Learning, Columbia University (x4)
	· Python for Data Science, Columbia Business School
	· Python for Managers, Columbia Business School (x6)
	· Blockchain to Business: Beyond the Hype, Columbia Business School

2012   Teaching Assistant, USC
· Introduction to Biomaterials and Tissue Engineering

Accepted Financial Awards

2021	UCLA Graduate TA Award (voted top TA for graduate courses by department)
2021	MIT Shultz Fund (w/ Basil Halperin)
2020–2021	UCLA Ziman Center for Real Estate Grant (w/ Jesper Bojeryd)
2020–2021	Institute for Humane Studies – Humane Studies Fellow
2020	UCLA Economics Departmental Teaching Award for Excellence in Remote Learning
2020	UCLA Centennial Fellowship
2018–2020	UCLA Graduate Dean Scholar Award
2019	Cato Institute's Alternative Money University
2018–2019	UCLA University Fellowship
2016–2017	MIT Advanced Study Program
2008–2012	USC University Grant