

Christopher Watkins

Github: christopher-watkins

Url: christopher-watkins.github.io

I am an aspiring researcher in economics and computational science. My professional background lies in applying analytical methods to problems of asset allocation and investment portfolio design in my consulting work for institutional investors.

Education

2024 Johns Hopkins University
M.S. Applied Economics

2018 University of Kansas
B.S. Mathematics (Phi Beta Kappa, University Honors, philosophy minor)

Employment & Professional Experience

DIMENSIONAL FUND ADVISORS (AUSTIN, TX)

2021-2022 Portfolio Consulting Associate
Lead institutional client portfolio consultations and bespoke research projects as a core member of the specialized subgroup of the investment team responsible for asset allocation research, analytics, and consultative services across US, EMEA and APAC clientele.

2020-2021 Portfolio Consulting Analyst
Served as the analytical support for the firm's most crucial asset allocation client consultations. Conducted 100+ bespoke, *ex-ante* holdings-based asset allocation analyses; comprehensively analyzed portfolio exposures across regions, asset classes, security types; computed proprietary valuation measures. Performed 100+ *ex-post* returns-based time series analyses including regressions, tracking error, excess correlation, conditional performance, marginal contribution to risk.

2018-2020 Financial Advisory Services Associate
Entry-level, generalist role combining portfolio analysis and investment communications support to financial advisory clientele.

Projects & Writing

PROJECTS

- 2023 "Forecasting Credit Card Delinquencies with ARIMA and Exponential Smoothing Models", 2023, *Statistical project for Time Series Econometrics graduate course at Johns Hopkins*
- 2023 "Stationarity and Predictability in US Stock Indices", 2023, *Empirical project for Time Series Econometrics graduate course at Johns Hopkins*
- 2023 "Strategy Design, Implementation, and Performance Review of a Virtually-Managed Derivatives Portfolio", 2023, *Course project for Economics of Derivatives graduate course at Johns Hopkins*
- 2023 "VAR model and impulse responses for two construction industry competitors", 2023, *Modeling project for Time Series Econometrics graduate course at Johns Hopkins*
- 2023 "Evolution of the Federal Reserve Balance Sheet", 2023, *Data analysis project for Monetary Economics course at Johns Hopkins*

TALKS

- 2023 "Nonlinear Dynamics of Monetary Economic Flows", Talk given to students of the *Modeling and Simulation of Complex Systems* graduate course at Johns Hopkins.

TERM PAPERS

- 2023 "A Comparison of New Keynesian DSGE models and Post-Keynesian SFC models", 2023, *Academic term paper for Monetary Economics graduate course, Johns Hopkins University*
- 2017 "Are the core commitments of scientific realism defensible?", 2017, *Academic term paper for philosophy of natural science course, University of Kansas*
- 2017 "The Role of Epistemic Probability in Quantum Mechanics", 2017, *Academic term paper for philosophy of natural science course, University of Kansas*
- 2017 "Searl's Sophistry: Examining the Foundation of the Chinese Room", 2017, *Academic term paper for philosophy of computation course, University of Kansas*

Areas of competence

Economics: Macroeconomics, monetary theory, asset pricing and finance, portfolio strategy.
Statistics & Econometrics: Time-series analysis, ARIMA, VAR, GARCH, DSGE modeling.
Programming: Python, R, Stata, Matlab & Dynare, L^AT_EX, Emacs Lisp, Excel & MS Office.
Computational modeling: Nonlinear dynamical system simulation, numerical methods, stability and bifurcation analysis.

Academic Research Experience

FACULTY-LED INDEPENDENT STUDY COURSES

- Spring 2018 Computational Economic Forecasting Project
(Advised by Professor Prakash Shenoy, University of Kansas), *Applied machine learning techniques to forecasting public company income statement and balance sheet data.*
- Spring 2017 Independent study course in Artificial Intelligence
(Advised by Professor Dongkyu Choi, University of Kansas), *Surveyed the field's history and engineering fundamentals with an emphasis on modern machine learning techniques.*
- Spring 2017 Independent study course in the Philosophy of Computation
(Advised by Professor Corey J. Maley, University of Kansas), *Studied the philosophical foundations of computation, logic, mathematics, and epistemology. Produced a paper discussing the logical challenges presented in John Searle's classic thought experiment on AI "The Chinese Room".*

Non-degree academic coursework

- Summer 2017 The London School of Economics, Coursework in finance and accounting (London, UK)
- Spring 2016 Institut Catholique de Paris, French language immersion program (Paris, France)

References

Available upon request.