

Yuchao Li

Santa Cruz, CA

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EDUCATION

University of California, Santa Cruz

Santa Cruz, CA

*Ph.D. in Economics with a Designated Emphasis in Data Science | GPA: 3.77/4.0 Sep. 2021 – Jun. 2027 (Expected)***State University of New York, Buffalo State**

Buffalo, NY

*M.A. in Applied Economics | GPA: 4.0/4.0 Sep. 2020 – Jun. 2021***Shandong University of Finance and Economics**

Jinan, China

Bachelor of Economics (Honors Program) | GPA: 3.91/4.0 Sep. 2016 – Jun. 2020

RESEARCH FIELDS

Primary: Asset Pricing, Behavioral Finance**Secondary:** Macroeconomics, Macro-Finance

WORKING PAPERS

Decoding the Factor Zoo: Insights from Arbitrage Trading (with Yuntong Wu) [Job Market Paper]

Hundreds of cross-sectional return predictors populate the factor zoo, yet whether each reflects compensation for systematic risk or mispricing remains an open question. We classify the factor zoo using sophisticated arbitrageurs' observed trading as an informed indicator of mispricing, and apply it to the 212 factors of the Chen and Zimmermann (2022) open-source asset pricing database, conservatively classifying 29 as mispricing. Our classification recovers the building blocks of the Stambaugh–Yuan (SY) and Daniel–Hirshleifer–Sun (DHS) mispricing factors without using any information from either model. A Common Mispricing Factor (CMF) built from a high-conviction core of nine mispricing factors earns 0.77% per month, is unspanned by every leading model, and subsumes the HML, RMW, CMA, and MOM premia. A parsimonious three-factor model (MKT, SMB, CMF) prices the 183 unclassified factors as well as leading benchmark models (FF5+MOM, q5, SY, DHS) and leaves the fewest factors unpriced. The results hold out of sample over 2016–2024 and are robust to alternative classification rules and model specifications.

Loss Aversion, Diagnostic Expectations and Asset Prices

Standard asset pricing models with rational expectations struggle to jointly account for three prominent features of aggregate stock returns: a large equity premium, excess volatility, and the asymmetric volatility phenomenon (AVP), whereby volatility rises more after negative return shocks than after positive shocks of the same magnitude. I develop a consumption-based asset pricing model in which investors are loss averse and form diagnostic expectations. These two complementary mechanisms generate high and volatile discount rates that respond asymmetrically to news. With empirically plausible degrees of loss aversion and diagnosticity, the model jointly accounts for the equity premium, excess volatility, volatility clustering, and the AVP. These results show that a unified behavioral framework can jointly account for several central features of aggregate asset prices through endogenous mechanisms.

WORK IN PROGRESS

Regime Learning and Factor Zoo Dynamics

What states govern time variation in expected returns? I infer these states directly from 212 anomaly portfolios, without specifying ex ante which macroeconomic or financial variables define them. An autoencoder extracts the low-dimensional structure from anomaly returns, and a hidden Markov model identifies persistent states in their dynamics. Anomaly premia exhibit strong common state dependence: expected returns and the attainable Sharpe ratio vary substantially across the learned states. The learned states imply economically meaningful variation in the factor-spanned stochastic discount factor and predict subsequent factor performance.

TEACHING EXPERIENCE

Instructor <i>Department of Economics</i>	UC Santa Cruz <i>Mar. 2025 – Aug. 2026</i>
• ECON 100B: Intermediate Macroeconomics, Summer 2026 • ECON 294A: Python for Finance (graduate), Spring 2025 and Spring 2026 • Award for Excellence in Teaching	
Teaching Assistant <i>Department of Economics</i>	UC Santa Cruz <i>Sep. 2021 – Present</i>
• ECON 236: Financial Engineering (graduate); ECON 131: International Financial Markets; ECON 113: Introduction to Econometrics; ECON 22P: Introduction to Python for Data Science; ECON 1: Introductory Microeconomics; ECON 2: Introductory Macroeconomics; ECON 136: Business Strategy; ECON 149: The Economies of East and Southeast Asia	

RESEARCH EXPERIENCE

Research Assistant <i>Department of Economics</i>	UC Santa Cruz <i>Aug. 2022 – Dec. 2022</i>
• Built an automated Python pipeline (Selenium, BeautifulSoup, PDFMiner, Camelot) to retrieve and parse several decades of annual reports from 200+ global banks, standardizing risk metrics such as Value at Risk (VaR) and derivative holdings into research-ready panel data; reduced manual data collection time by about 90%.	
Research Assistant <i>Department of Economics</i>	SUNY Buffalo State <i>Sep. 2019 – May 2020</i>
• Developed a fuzzy-matching pipeline (Levenshtein string similarity, cross-validated on phone numbers, addresses, and CEO names) to merge two firm-level datasets of 10M+ observations each with mixed Chinese/English naming; achieved a 95% match rate and reduced missing or misclassified records by 70%.	

HONORS AND AWARDS

Teaching Assistant Award for Excellence in Teaching UC Santa Cruz	2024, 2025
Outstanding Graduate Award Shandong University of Finance and Economics	2020
First-Class Scholarship Shandong University of Finance and Economics	2016 – 2020
Bronze Medal ACM International Collegiate Programming Contest, Shandong Province	2018
First Prize China Undergraduate Mathematical Contest in Modeling, Shandong Province	2018

PROFESSIONAL SERVICE

Referee: Journal of International Money and Finance; International Review of Economics and Finance

SKILLS

Programming: Python, R, SQL, MATLAB, Stata, C/C++, LaTeX, Git
Methods: Time Series Analysis, Machine Learning, Structural Estimation
Data: CRSP, Compustat, I/B/E/S, Bloomberg, SEC filings (10-K, 10-Q, 13F)
Languages: Chinese (native), English (fluent)

REFERENCES

Alonso Villacorta (advisor) <i>Associate Professor of Economics, UC Santa Cruz</i>	avillaco@ucsc.edu
Hikaru Saijo (co-advisor) <i>Associate Professor of Economics, UC Santa Cruz</i>	hsaijo@ucsc.edu
Galina Hale (committee member) <i>Professor of Economics, UC Santa Cruz</i>	gbhale@ucsc.edu