

Teaching Statement

Qihong Ruan

My teaching is guided by a simple conviction: students learn economics and finance best by *doing* them. Abstract concepts become durable knowledge when students collect data and test hypotheses themselves, trade in simulated markets, or participate in classroom experiments whose outcomes they can feel. Across ten courses at three universities — in English and in Chinese, in formats from 200-student lectures to MBA seminars, online, hybrid, and in person — I have built my teaching around this principle of active, experience-based learning, and around the operational discipline that large courses demand.

Teaching Experience

At Cornell, I served as a teaching assistant for the introductory economics sequence — both *Introductory Microeconomics* and *Introductory Macroeconomics*, courses of over 200 undergraduates — across multiple years and formats. Beyond leading discussion sections, I twice served as Coordinating TA (COTA) — once online, once in person — managing and mentoring the TA team, organizing grading workflows and proctoring, and overseeing exam logistics. These roles taught me how a large course runs from top to bottom: not only how to deliver material, but how to build the operations that let a teaching team deliver it consistently — including fluency with the full technology stack of modern teaching, from learning management systems (Canvas, Blackboard) to publisher platforms (MyEconLab, Connect). I also assisted *Econometrics and Statistics*, another 200-student course, where I taught core statistical concepts — maximum likelihood, the law of large numbers, the central limit theorem — and led Stata lab sessions in which students applied econometric methods to real data. Working with Professor Douglas McKee, a leader in active-learning pedagogy, sharpened my use of these techniques in large-class settings. At the MBA level, I assisted Professor Lin William Cong’s *Demystifying FinTech and Big Data*, reviewing and giving feedback on students’ FinTech business plans — experience directly relevant to teaching practice-oriented, professionally diverse audiences.

Teaching frontier, highly technical material is where I believe I add the most value, and distillation is a craft I take seriously. In a Ph.D. market microstructure course, I presented Lehar and Parlour’s work on decentralized exchanges: I spent long hours digesting the mechanism design — how automated market makers and liquidity pools set prices, and how they reallocate adverse selection risk relative to limit order books — and distilled it into a fifty-slide deck that walked a mixed audience from Uniswap’s constant-product rule to the model’s equilibrium conditions. In econometrics, I presented Molinari’s framework for the partial identification of structural models, teaching what can credibly be learned when point identification fails. In health economics, I presented Finkelstein, Hendren, and Shepard’s estimation of demand curves for subsidized health insurance, translating a regression-discontinuity design into plain intuition about willingness to pay. These are three of eleven course presentations — spanning market microstructure, network theory, international finance, labor finance, health economics, and econometrics — all available on my website; my AFA 2026 presentation on perpetual futures grew from the same discipline. It is how I intend to teach: absorb the complexity myself, so that students receive the clarity.

My earlier teaching was conducted largely in English. At Xiamen University's Wang Yanan Institute (WISE), known for its all-English curriculum, I assisted *Experimental Economics*, *Probability Theory*, and a Ph.D.-level *Advanced Econometrics* course, and received the **Best Teaching Assistant Award** for Probability Theory. As an undergraduate at Sun Yat-sen University, I helped design experiential components for three courses: students ran simulated stock trading in *Financial Markets*, collected and tested data in *Econometrics*, and played public-goods games in *Public Finance* — early experiments in the learning-by-doing approach I still use.

Courses I Am Prepared to Teach

I am prepared to teach, in English or Chinese, at the undergraduate, MBA, or Ph.D. level:

- **FinTech and Digital Assets** — blockchain economics, cryptocurrency markets, stablecoins, and DeFi, grounded in my research on perpetual futures and crypto adoption;
- **AI in Finance** — large language models, computer vision, and agentic AI applied to financial research and practice, a course few candidates can offer from active research experience;
- **Market Microstructure** — liquidity, price discovery, and market design, from equities to digital assets;
- **Investments / Empirical Asset Pricing** — with hands-on portfolio and data components;
- **Econometrics and Statistics** — at any level, with programming labs in Python, R, or Stata.

Teaching in the Age of AI

My research on agentic AI shapes how I intend to teach. I build systems in which AI agents replicate empirical studies and are benchmarked on research tasks; the same tools translate naturally to the classroom — personalized problem sets, instant feedback on code and empirical work, and replication-based assignments in which students verify published findings with AI assistance and then probe where the AI goes wrong. I want my students to graduate both skeptical and fluent: able to use AI to accelerate their work, and trained to check it the way a referee would. I see this as the central teaching challenge of the coming decade, and one my research prepares me to meet.

Teaching has also fed back into my research: managing large courses taught me to build systems that scale, and student questions have repeatedly pushed me toward clearer framings of my own work. I look forward to continuing both as a teacher and as a colleague who helps a department meet growing demand for rigorous, practice-connected instruction in finance, data science, and AI.