

Shiying (Catherine) Zhang

sz9883@princeton.edu • +1 (609) 786-0548 • linkedin.com/in/catherine-zhang-936499272/

EDUCATION

Princeton University , Princeton, NJ, US <i>Master of Finance (Financial Mathematics)</i> GPA: 3.97/4.00	Aug 2025 – Jun 2027
Courses: Asset Pricing (A+), Advanced Algorithm Design (A), Derivatives and Currency (A), Statistical Analysis (A+), High Frequency Markets (A), Financial Econometrics (A), FinTech, Energy & Commodities Markets	
Tsinghua University , Beijing, China <i>Bachelor of Engineering (Computer Science and Technology) + Bachelor of Economics (Economics and Finance)</i> GPA: 3.94/4.00, Rank: 1/12	Sep 2021 – Jun 2025
- Honors: Graduate with Honors, National Scholarship, Excellent Graduation Thesis, Commencement Speaker - Courses: 4.0 in all math courses; Econometrics, Data Structure and Algorithm, Machine Learning, Quantitative Analysis, Corporate Finance, Investment Theory, Software Engineering, Computer Organization, Operation System	
University of Oxford , Oxford, UK <i>Yinghua Scholar (Exchange program), Economics and Computer Science, Distinction (1st class)</i>	Oct 2023 – Jun 2024

INTERNSHIP

Jump Trading <i>Summer Intern, Quantitative Trader</i>	Shanghai, China Jun-Sep 2026
- China equity mid-frequency trading desk. Built an LLM-enabled alternative data pipeline. - Researched, monetized, and executed alpha signal from alternative dataset. Owned end-to-end systematic trading with discretionary execution adjustment (e.g., hedges, hyperparameters). Ranked 1st in paper trading.	
JPMorgan Chase <i>Summer Intern, Markets – Research</i>	Hong Kong S.A.R Jun-Aug 2025
Applied a data-driven new approach in defining the half-life of ‘self-expressive’ good. Demonstrated a link from sales to stock price quantitatively. Work was published by JPM. Presented in regional morning meeting call.	
Chow Tai Fook Enterprises <i>Off-cycle Intern, Quantitative Researcher, Family Office hedge fund department</i>	Beijing, China Feb-May 2025
Fine-tuned a BERT-based news classifier; extracted alternative factor via LLM; utilized DolphinDB. Achieved robust back-testing performance (annualized excess return c.20%, maximum drawdown -8%, IR c.3).	
Goldman Sachs <i>Summer Intern, Global Investment Research (GIR)</i>	Hong Kong S.A.R Jun-Aug 2024
- Tracked companies across consumer sector; led first-coverage initiation of Laopu Gold (06181.HK). - Independent projects: China’s rising middle-class consumption; future outlook of yoga industry.	
Springs Capital <i>Summer Intern, Fundamental Investment Research</i>	Beijing, China Aug-Sep 2023
Reviewed JCET (600584.SH) quarterly financial reports and stock data since 2016; analyzed historical trends in the semiconductor packaging and testing industry, incl. capacity expansion and volume-price dynamics.	
X-Asset Management <i>Summer Intern, Quantitative Researcher</i>	Shanghai, China Jul-Aug 2023
Researched on daily frequency factor portfolio strategies: normalization, rolling regression, factor clustering.	

RESEARCH & COMPETITION

LLM Coding Agent <i>Claude Code-style agent architecture</i>	Jun 2026
Built a Claude Code-style agent using LLM APIs, supporting iterative tool use, MCP-based tool integration, persistent memory, skill workflows, hook guardrails, subagent orchestration, and context compaction.	
IMC Prosperity 4 Trading Competition <i>ranked 50 (global) among 18,000+ teams</i>	Apr 2026
Built strategies across bot behavior modeling, pairs/statistical arbitrage, alpha signal design, and spread-sensitive execution optimization across five rounds of algorithmic and manual trading challenges.	

SKILLS

Language:	Mandarin (native), English (proficient, TOEFL: 110 (29/29/26/26), GRE: 161+170+4)
Computer:	C++, Python, Java, JavaScript, Stata, Linux, PyTorch, git, Android app dev, five-stage pipeline RISC-V CPU dev (System Verilog), software dev (Django/React/Streamlit), OS Ucore dev, Cursor vibe coding
Interests:	Poker (participated in UK poker competition representing Oxford), debate (Best Debater at Tsinghua), cricket (5th place in Beijing Universities Competition), squash, piano (ABRSM 8th)
Leadership:	SEM Student Union Department Manager, CST Science and Technology Association Member, class monitor, CST Debate Team leader, member of Tsinghua Debate Team, member of SEM Finance club