

XiaoYun Tang

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EDUCATION

- King's College London**, PhD in Political Economy 2023-Expected 2027
London, United Kingdom
- Third-year PhD candidate in the Department of Political Economy
 - *Thesis project: Banking Crises in East Asia: A Textual and Econometric Exploration Analysis, 1881-1936.*
 - Economic and Social Research Council Studentships (UK Research and Innovation, LISS-DTP)
 - Economic History Society's (EHS) Research Fund for Graduate Students
 - Faculty of Social Science & Public Policy (SSPP) Postgraduate Research Grant Award (KCL)
- Lady Margaret Hall Oxford Summer Programmes**, Short Academic Programme July 2025-Aug 2025
Oxford, United Kingdom
- Advanced Artificial Intelligence and Machine Learning: Computer Vision (Grade: 82, A+)
 - Advanced Artificial Intelligence and Machine Learning: Natural Language Processing (Grade: 83, A+)
- London School of Economics and Political Science**, MSc Economic History 2022-2023
(Research)
London, United Kingdom
- Distinction
 - Hunt Prize for the Best Dissertation
 - Highly Commended Overall Masters Performance
- University of New South Wales**, MSc Business Analytics & Finance 2018-2020
Sydney, Australia
- Central University of Finance and Economics**, BSc International Political 2010-2014
Economy
Beijing, China

RESEARCH INTERESTS

Banking Crisis, Monetary History, Social Network Analytics, Large Language Model

RESEARCH

- Modernity, Information Flow, and Banking Crisis in China 1881-1936** 2022-2023
- Digitized 3,229 English and 15,704 Chinese articles from 72 newspapers using an OCR pipeline in Python and TensorFlow for quantitative analysis.
 - Analyzed the relationship between information, sentiment, and banking panics using the Temporal Fusion Transformer (TFT) model in PyTorch.
 - Found that the "dominance" sentiment in English newspapers had the strongest influence on banking panics through NLP analysis with NLTK and spaCy.
 - Identified "telephone density" in Chinese newspapers as a significant predictor (9% importance) of banking panics via TFT model analysis.
- Strategic Opportunities for Capital Bike Sharing in Big Data** 2018-2019
- Applied data analytics and gravity models to optimize bike sharing management after reviewing the literature on sharing economy.
 - Processed and analyzed 3 years of company data using SQL in SAS Enterprise Guide and SAS Enterprise Miner, including data cleaning and management.
 - Forecasted 5-year bicycle demand using SAS regression models, recommending strategies on demand growth, peak usage, popular stations, and employee salaries based on data analysis.

Stock Market Movement Prediction and Portfolio Optimization

2019

- Analyzed 8 years (2009–2017) of market data to compare passive and active investment strategies, creating an optimal portfolio.
- Collected daily price data of 5 ETFs from FactSet for quantitative analysis.
- Implemented Markowitz Portfolio Theory, CAPM Model, and Treynor-Black Model using VBA for portfolio optimization.
- Evaluated portfolio performance out-of-sample using Treynor's measure, Jensen's alpha, and M^2 , providing investment recommendations.

PUBLICATION

"Disciplining the State: Confiscation and Strategic Governance in Late Imperial Qing China," with Yitong Qiu, Conditionally Accepted, *Past & Present*.

CONFERENCE PAPERS

Panic Without Failure? Public Anxiety in 1930s China

April 2026

- Conference: Economic History Society Annual Conference 2026
- Investigated the mismatch between institutional stability and public panic in 1930s China during the Great Depression.
- Applied transformer-based NLP models fine-tuned for historical financial texts to analyze sentiment, attention, and thematic shifts in crisis narratives.

Seizing the Pawn: A Social Network Analysis of Confiscation Practices in Late Imperial Qing China (1644-1912)

Jan 2024

- Conference: American Historical Association, American Legal History Association
- Analyzed a dataset of 309 individuals and 7,587 relationships using social network analysis techniques.
- Employed Python and NetworkX to uncover influence patterns among ethnic groups, revealing that confiscated individuals were not the most influential in the empire.

EXPERIENCE

Teaching Assistant

2025-

University College London

- HIST0008: Making History
- HIST0212: The Global Economy Since 1700

Summer Internship

2025

University College London

- Digitize balance sheets of the SCSB (1950–1964) and macro-financial data on Hong Kong's foreign currency money supply (1950–1970).
- Apply OCR and computer vision techniques to historical documents. Conduct quantitative and qualitative analysis of financial trends.

Teaching Assistant

2023-

King's College London

- 5SSPP263 The Growth of Financial Capitalism
- Teaching and Explaining Concepts: Delivered engaging tutorials on the growth of financial capitalism, covering topics such as the evolution of central banking, financial crises, and monetary policy, showcasing the ability to communicate complex economic ideas clearly and effectively.
- Assessment and Feedback: Marked essays and assignments with a focus on critical analysis, historical accuracy, and policy relevance, providing constructive feedback to improve analytical skills—an approach directly aligned with assessing economic reports or policy recommendations.

Research Assistant

2023-2024

University of Oxford

- Global Correspondent Banking 1870-2000 Project.
- Analyzed historical banking data and correspondent networks using Python and social network analysis techniques, incorporating BIS exchange rates (1951–1979) to convert 73 countries' local currencies to USD.
- Created visualizations of banking networks with NetworkX and Folium, illustrating network structures and relationships.

Summer Internship

2023

London School of Economics and Political Science

- Analyzed Chinese tax records from the Twenty-Four Histories using BERT for natural language processing and regression models for quantitative analysis.
- Transcribed early modern London's tax records, applying Python to uncover linkages between taxpayers and orphans.

Research Assistant

2020-2022

Southern University of Science and Technology

- Assisted in the "International Business School Rankings" program for Business School Corporation with United International College (UIC): alumni data collection from governments, universities, companies, sample production, progress supervision.
- Collaborated with the professor to take ownership of ShenZhen Merchant Group history research program in Quantitative History Research Center: literature review, proposal research, questionnaires design and data collection.
- Applied statistical techniques and flowchart design to participate in the grant application of the National Natural Science Foundation of China about credit risk.

Analyst Vacationer

2018-2019

ERNST & YOUNG (CHINA) Advisory Limited

- Conducted IT audits and Journey Entry testings for Haier and Kempinski Hotel: data collection, data management, and data analytics, more than 500 Journeys using SQL.
- Prepared financial statement reports and documentation for clients from a diverse sector.
- Provided internal control and audit management improvement services for China Mobile Information Security Centre. Summarised internal control advisory for China National Offshore Oil Corp (CNOOC).

Assistant Project Manager

2014-2017

National CIMS Engineering Research Center, Tsinghua University

- Assisted project manager in planning, directing, analysing, coordinating assigned projects, and facilitating projects within time and budget considerations.
- Mainly responsible for three projects: ZT Virtual Prototype and Semi-physical Gang Control System (Sep 2014 Sep 2015) | Port Portal Crane Simulator. (Sep 2015 May 2016) | Railway High-speed Virtual Reality System. (May 2015 Dec 2016)

OTHER

Languages: Python, R, SQL, Manchu

Modelling and Analysis: SAS Visual Analytics, SAS Contextual Analytics, SAS Enterprise Guide, STATA, OX, NVivo, Visio, Oracle datamodeler, Oracle SQLdeveloper, Pytorch

Others: SAS Certificate, Securities Qualification Examination Certificate, CFA Level 1 Candidate