

Yuxuan Xiong

Phone: +1 6178809246 | E-mail: yuxuanxiong0703@gmail.com

437 S Hill St, Los Angeles, CA, USA, 90013

EDUCATION

University of California, Irvine

Sep 2026 - TBD

Ph.D. in Education

University of California, Los Angeles

Sep 2024 - Jun 2026

Master of Quantitative Economics

GPA: 3.53/4.0

Brandeis University

Jun 2020 - May 2024

B.S. in Computer Science and B.A. in Economics obtained in June 2024

GPA: 3.78/4.0

Honors and Awards: Dean's List (2022 Fall, 2021 Fall, 2021 Spring)

University of Tokyo

Apr 2023 - Aug 2023

Exchange Program

GPA: 3.75/4.0

University of Chicago

Jun 2023 - Aug 2023

Data and Policy Summer Scholar Program

RESEARCH EXPERIENCE

Royal Holloway, University of London, Economics Department

Remote

Guest Speaker, invited by Petar Stankov

Expected in Dec 2025

- Delivering an invited seminar on applications of AI in economics education, expanding on CTREE 2025 research on market structure, competition, and agglomeration.

The Chinese University of Hong Kong, Law Department

Remote

Research Assistant for Professor Michelle Miao, AI implementation in Legal field

Nov 2025 - Present

- Conducting a literature review to explore the application of generative AI in the legal field.
- Designing a RCT to examine the impact of different presentation methods on people's perceptions of the credibility and legitimacy of AI law.

Annual Review of Law and Policy in Health and Social Work

Remote

Student Editor

Mar 2025 - present

- Familiarizing with the standard The Bluebook citation format and footnote format and providing relevant advises to the author's footnote as required.

Morning Star Pres

Remote

Host for Professor Stephen Tumino

Nov 2025

- Organizing and hosting a workshop featuring Professor Stephen Tumino, coordinating event logistics, publicity, and communication between the publisher, the speaker, and participants.
- Developing the event structure and prepared a set of introductory remarks and discussion questions that connected Thinking Blue / Writing Red to contemporary cases such as TikTok, Shein/Temu, and U.S.-China relations.
- Supervising the discussion and Q&A session, facilitating audience engagement, managing time, and guiding conversation toward key themes of Marxism, media, and class analysis.

China Law Journal

Remote

Research Assistant, AI and War Research, Under the supervision of Professor George Lucas

Feb 2025

- Serving as a panel speaker at a seminar led by Professor George Lucas, providing an in-depth introduction and analysis of the scope and impact of the Israeli use of the AI Targeting system, “Lavender.”
- Conducting a comprehensive review of mainstream media coverage on the Lavender system across multiple countries, analyzing its integration into broader discussions on military ethics and the Law of Armed Conflict (LOAC).
- Researching and gathering related war data from authoritative sources such as the UN and OCHA, including casualty statistics. Analyzed changes in data before and after the deployment of AI targeting to assess whether the Israeli government’s use of AI targeting reduced collateral damage in alignment with the government’s original expectations.

Havard University, Kennedy School

Cambridge, USA

Research Assistant for Professor Galit Eizman

Dec 2024 - present

- Collecting geographical location for all the university in United States as an example, implementing different Machine Learning algorithm such as Clustering algorithm to identify the education agglomeration within the United State.
- Generalizing the Previous method to different industries and using java-script to create a website which allows user to implement their own geographical data.
- Applying it to economic teaching area, allowing student to create their own interactive geographical agglomeration map and see the agglomeration for their chosen industry, and understand how the agglomeration form and change by adding the geographical location gradually.
- Creating Visualization websites to explain different statistical methods such as Kernel Density Estimation, clustering algorithm, and implementing it to teaching area to help the students to understand and learn the methods related to the study of agglomeration in an interactive way.
- Connecting the pre-trained ChatGPT model to the teaching website, which helps students learn agglomeration in a modernized way through real-time Q&A, helping professors spend Office Hour on more complex problems.

University of California, Los Angeles

Los Angeles, USA

Research Project innovated by Professor Falco J. Bargagli Stoffi

Oct 2024 - Feb 2025

- Conducting statistical and machine learning-driven analyses on the PISA dataset, focusing on causal inference methodologies to assess educational and environmental determinants of student performance.
- Implementing advanced imputation techniques using Random Forest and k-Nearest Neighbors (KNN) to address missing data, ensuring robustness and reliability in large-scale education datasets.
- Applying unsupervised learning methods, including Isolation Forest, to detect anomalies and outliers, refining data integrity for causal modeling.
- Utilizing feature importance ranking to identify key predictors of student achievement, leveraging insights

for policy recommendations in education and public health research.

Naval Postgraduate School/Southern Illinois University

Remote

Research Assistant for Professor George Lucas

Nov 2024 - May 2025

- Conducting a legal and ethical analysis of AI-assisted targeting systems in military conflicts, with a focus on international humanitarian law (IHL) and just war theory.
- Examining the AI targeting tool and assessing its compliance with the principles of distinction, proportionality, and necessity under international law.
- Analyzing casualty data from UN sources to evaluate changes in civilian and combatant deaths before and after AI deployment, identifying potential violations of the Geneva Conventions and customary IHL.
- Investigating state responsibility and accountability mechanisms for AI-assisted military decisions, exploring legal precedents and emerging norms in autonomous weapons governance.
- Conducting a comparative media analysis across different geopolitical contexts, examining how different legal and ethical frameworks influence the global discourse on AI-assisted warfare.

University of Tokyo, Department of Economics

Tokyo, Japan

Research Assistant for Professor Eric Weese

Jun 2023 - Oct 2023

- Conducted in-depth research on the supply relationships between Japanese automobile part suppliers and automobile brands, analyzing industry dynamics and partnerships.
- Involved in rigorous data analysis and cleaning processes using R, which included organizing, filtering, and interpreting data sets to ensure accuracy and relevance.
- Developed and set up event studies to assess the impact of various factors on the supply chain, employing statistical methods and regression analysis in R to draw meaningful conclusions.

Brandeis University, Department of Economics

Waltham, MA

Research Assistant for Professor Galit Eizman

Jan 2023 – Mar 2025

- Conducting an in-depth study using R for data analysis to examine the impact of agglomeration effects on industries, focusing on how environmental factors, such as the density of educational institutions, influence income levels. This involved applying advanced statistical techniques and econometric methods to ensure robust and accurate results, contributing to the broader understanding of regional economic development and policy implications.
- Collected and meticulously curated data from various authoritative sources, developed a unique and comprehensive dataset, and constructed sophisticated multiple regression models to evaluate the comparative income advantages of schools situated in high-density university areas versus those in isolated locations. The models were rigorously tested for validity and reliability, employing techniques such as heteroscedasticity testing, multicollinearity diagnostics, and goodness-of-fit measures.
- Implemented several machine learning algorithms, including clustering algorithms and time series analysis, to examine and predict the geographical allocation of higher education within the United States. This involved developing and optimizing predictive models to identify trends and patterns in educational institution distribution and their economic impacts, using methods such as k-means clustering for identifying regional clusters and ARIMA models for time series forecasting.
- Leveraging machine learning techniques to enhance the analytical depth of the study, using tools such as supervised learning for regression tasks, unsupervised learning for clustering, and advanced time series forecasting methods to predict future trends based on historical data. This integration of machine learning approaches with traditional econometric analysis provided a comprehensive

understanding of the dynamic relationships between educational density and economic outcomes.

- Engaged in extensive literature review and theoretical analysis to contextualize the empirical findings within the broader framework of agglomeration economics and urban studies. This included examining seminal works and contemporary studies on the economic benefits of educational clusters, spillover effects, and regional economic growth.

Brandeis University, Michtom School of Computer Science

Waltham, MA

Research Assistant for Professor Dylan Cashman

Jan 2023 - Apr 2024

- Conducted comprehensive quantitative and qualitative analysis of machine learning packages across multiple prominent open-source repositories (GitHub, CRAN, PyPI, Anaconda). This included the examination and classification of approximately 300-400 machine learning visualizations based on their visual encoding techniques, following Leilani Battle's established classification method. The study aimed to identify trends in visualization practices and assess their effectiveness in conveying complex machine learning concepts.
- Developed an interactive bubble chart to visually represent the popularity, categorization, and usage patterns of various ML packages. This visualization tool not only provided insights into the current landscape of machine learning tools but also facilitated comparative analysis of different packages based on their adoption and application in various domains.
- Constructed a comprehensive guideline for the machine learning community, detailing best practices for effectively applying different methods of visualization within diverse computational environments. This guideline incorporated theoretical frameworks and practical insights, aiming to enhance the clarity and interpretability of machine learning models through appropriate visualization techniques.
- Presented research findings at a series of departmental seminars and retreats, addressing professional audiences that included academics, industry experts, and fellow researchers. These presentations involved detailed methodological explanations, data-driven insights, and discussions on the implications of visualization practices in machine learning.
- Drafted the methodology and analysis sections for a submitted short paper, articulating the research process, analytical techniques employed, and the significance of the findings. The paper aimed to contribute to the academic discourse on the role of visualization in enhancing the comprehensibility and transparency of machine learning models.

ADDITIONAL EXPERIENCE

2026 IEEE Global Engineering Education Conference (EDUCON)

United States

Manuscript reviewer

Nov 2025 – Dec 2025

- Invited to review the manuscript for IEEE EDUCON 2026, to be held April 27-30, 2026, in Cairo, Egypt.

2025 Potomac ACM Policy Challenge

Remote

Volunteer, under the supervision of Haley Sanders

Jul 2025 - present

- Reviewing students' submissions on topics such as AI governance, privacy, cybersecurity, and online speech using a standardized rubric; providing in-depth, research-oriented feedback to strengthen policy reasoning, empirical grounding, and the analytical rigor of their arguments.
- Integrating insights from public policy, economics, law, and machine learning to assess enforcement feasibility, budgetary and institutional constraints, and potential distributional effects; identifying common analytical gaps and drafting a policy research checklist to enhance methodological consistency

and evidence-based revisions.

- Collaborating with the competition chair to calibrate evaluations and shortlist finalists; preparing policy briefings that synthesize each paper's strengths, policy relevance, and equity implications for judges — demonstrating strong competence in academic policy analysis and interdisciplinary evaluation.

Mengbo Technology Co., Ltd.

Wuhu, China

Product Designer

Jan 2023 - Apr 2023

- Participated in the development of integrated hardware and software for the intelligent driving cockpit within the large project group "Zhuge Hypervisor."
- Responsible for bench and interaction testing, which included handling programming tests using signal replay and custom scripts; and conducting monkey tests on the Android platform to assess the interaction protocols, components, performance, and scenarios of the intelligent driving cockpit.
- Involved in the work related to hardware components (core boards, bottom boards, and structural parts) and software aspects (adaptation of QNX and Android systems, development and integration of navigation software, mobile connectivity, DMS and OMS, ADAS, and AVM&APA).
- Interfaced through CAN bus or directly with third parties (including TBOX, screens, TSP backend, and cameras).

Chery Automobile Inc.

Wuhu, China

Member of the Project Team

Dec 2022 - Mar 2023

- Investigated the interactions between the vehicle terminal and the whole process of automatic parking and conducted in-depth research on the APA automated parking system.
- Participated in the research and development of assisted driving vehicles of type L2. Achieved automatic parking by installing ultrasonic radar and on-board cameras.
- Coordinated work among colleagues at the same level, and integrated elements of individual members' work and reported to superiors.

Mengbo Technology Co., Ltd.

Wuhu, China

Member of the Project Team

Jun 2022 - Sep 2022

- Participated in the project entitled "Using Smart Parking Strategies to Solve the Problem of Insufficient Parking Spaces in Old Communities" by constructing new high-rise parking racks and installing automatic parking systems on cars.
- Completed work included analyzing which external sensors are necessary to enable cars that are not yet capable of fully autonomous driving to achieve that capability, among others.
- Refined the process of transmitting information from the car to the cloud as well as secondary confirmation.

CONFERENCES AND PUBLICATIONS

Yuxuan Xiong (2023), Analyzing Determinants of Happiness Score: A Comparison Based on Machine Learning Approaches, Atlantis Highlights in Computer Sciences, ISSN:2589-4900, Published.

Yuxuan Xiong & Ge Gao & Dylan Cashman (2024), Meet Them Where They Are: An Analysis of Visualization Use in Machine Learning Tutorials and Software Libraries, IEEE VIS Poster, published.

Ryan Calo & Danielle Keats Citron, trans by Bohan Hou & Yuxuan Xiong (2024), 自动化的行政国家：合法性危机(The Automated Administrative State: A Crisis of Legitimacy), China Law Journal, 10.55574/INTX1165, Published.

Yuxuan Xiong & Galit Eizman (2025), Tell Me who your neighbors are, will tell you who YOU are, Association for Education Finance and Policy (AEFP), Presented.

Yuxuan Xiong & Galit Eizman (2025), Tell Me who your neighbors are, will tell you who YOU are, Using AI in Class to Explore Market Structure, Competition and Agglomeration, AEA National Conference on Teaching and Research in Economic Education (CTREE), Presented.

Stephen Tumino(2024), trans by Yuxuan Xiong(2025), 蓝色思维/红色书写(Thinking Blue / Writing Red Marxism and the (Post)Human), Forthcoming, 978-988-70939-1-6, Dec 2025.

Yuxuan Xiong(2025), Beyond Geography: A Multidimensional Approach for New Geography Economic and practical application in Higher Education, 2026 X IEEE World Engineering Education Conference (EDUNINE), Accepted.

Yuxuan Xiong & Galit Eizman (2026), Mix & Match: When Competency-Based-Learning (CBL) meets AI and Economics, AEA National Conference on Teaching and Research in Economic Education (CTREE), Presented.

SKILLS AND INTERESTS

Programming & Tools: Python, R, MATLAB, Java, JavaScript, Blender, A-Frame, Excel, SQL

Data Science & ML: Clustering, Causal Inference, Visualization, Kernel Density Estimation, Time Series Forecasting

Languages: English (Full professional), Chinese (Native), Japanese (Conversational)