

Xiaolong Yang

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EDUCATION

Harvard University (A.M. in Regional Studies, East Asia)	Sep 2023 – Feb 2027 (Expected)
Applied Statistics Research and Coursework in Graduate Level Causal Inference, Machine Learning, and CS50	
The University of Tokyo (B.A. in Liberal Arts)	Apr 2018 – Mar 2023
Quantitative Methods and Political Science	
Peking University & National University of Singapore (Exchange)	2021-2022
Econometrics and Political Science	

SKILLS

Programming & Frameworks	R, SQL, Python, C, PyTorch, TensorFlow, Rust, JavaScript, React, Git, Jujutsu, L ^A T _E X
Causal Inference	Experiment design & evaluation, Causal machine learning, Online survey experiment
Statistical Modeling	Regression, Hierarchical models, Bayesian models, Tree-based methods
Machine Learning & AI	Supervised & unsupervised methods, Computer vision (YOLO), Agentic AI (LangChain)
Data Visualization	Base R, ggplot2, Matplotlib

EXPERIENCE

Venture Fellow, Insignia Ventures Partners	2026
• Sourcing and evaluating early-stage Southeast Asia startups across Quantum Hardware, Error Correction, and Cybersecurity.	
Causal Inference and Online Experimentation, Harvard University and MIT	2022-25
• Deployed causal ML methods to identify top treatment responders, enabling targeted roll-out under any budget constraint	
• Designed and implemented an online list experiment to elicit truthful political attitudes under strong self-censorship	
• Leveraged satellite data to detect and estimate heterogeneous treatment effects in observational & experimental settings	
• Isolated specific causal network effects on downstream behavior, controlling for competing pathways and time-varying confounder	
• Synthesized 50+ multi-site studies on external validity for published research on treatment effect generalizability	
Data Engineering and Software	2022-25
• Co-developed a package for experimental evaluation with machine learning methods (evalITR ; 25K CRAN downloads)	
• Built ETL data pipeline to extract, clean, analyze, and report on 1M+ record relational LobbyView database	
• Authored book chapters on R Markdown for reproducible computing and publishing (92 GitHub Stars)	
Data Science Outreach	2022-23
• Co-created companion exercises and teaching materials for <i>Quantitative Social Science: An Introduction in tidyverse</i>	
• Taught sections on data wrangling, causal inference, modeling to 40+ undergraduate and graduate students at UTokyo	
• Presented research in quantitative methodology conferences to 30+ attendees in Singapore and Japan	
• Delivered invited guest lecture on computer vision and entrepreneurship to 20 students at UT Austin	
Summer Business Associate Intern, The Pan-Pacific Group, Beijing	Summer 2022
• Researched China's renewable energy sectors to deliver financial market and investment insights to senior executives and clients	

SELECTED SOFTWARE & PUBLICATION

- Joe Liang, **Xiaolong Yang**. *GoatVision: End-to-end Custom Computer Vision Tracker for Cashmere Goats*. 2025.
Deep learning software using YOLO11 achieving 95%+ accuracy (2× over pretrained baselines) across 3,500-head goat farm
- Michael Lingzhi Li, Kosuke Imai, Jialu Li, **Xiaolong Yang**. *evalITR: Evaluating Individualized Treatment Rules*. R Package, CRAN. 2023. URL: <https://cran.r-project.org/web/packages/evalITR/index.html>
Treatment effects heterogeneity detection and individualized treatment rules evaluation with causal machine learning
- Chunhui Gao, Yifan Wang, Qiushi Yan, Liangliang Zhuang, **Xiaolong Yang**. *An Authoritative Cookbook for R Markdown*. Open-source Publication. 2023. URL: <https://cosname.github.io/rmarkdown-guide>

HONORS & AWARDS

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| • Asia Center Victor and William Fung Grant, Harvard University (USD \$29,780 × 2) | 2023–2025 |
| • Political Science Ph.D. Admission: UC Berkeley, UPenn, WashU (Courteously Declined) | 2023 |
| • Inaugural undergraduate recipient of UTokyo-EAA Young Researcher Grant (USD \$3,000) | 2022–2023 |
| • MEXT Honors Scholarship, Japan (USD \$5,000) | 2018–2019 |
| • UKMT Senior Mathematical Challenge Gold Medal | 2017 |