Guanghong Xu

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Summary

Ph.D. candidate in Economics with expertise in quantitative UX research, behavioral data analysis, and experimentation Extensive hands-on, primary field research in Kenya (36 months), Rwanda (10 months), and Tanzania (1 month) 4+ years of industry experience leading quantitative user research to drive insights based on surveys, focus groups, and field studies

TECHNICAL SKILLS

Statistical Analysis & Experimentation: Regression, ANOVA, T-tests, A/B Testing, Observational Study Designs, Policy Impact Evaluation, Instrumental Variable (IV), Diff-in-Diff, Regression Discontinuity Design (RDD), Synthetic Control Certifications: Financial Risk Manager (FRM) – Both Levels, Chartered Financial Analyst (CFA) – Level I Programming & Data Tools: R, STATA, Python, SQL, SurveyCTO, ODK, GIS, Power BI, Tableau, LATEX

Industry Experience

UX Research Scientist

Aug. 2021 – Sep. 2024

CGIAR International Livestock Research Institute (ILRI)

Nairobi, Kenya

- Led 4 large-scale UX research studies impacting 6,000+ smallholder farmers across 120+ Kenyan dairy cooperatives
- Developed and implemented survey instruments and behavioral analytics for user interaction with fintech applications
- Managed an A/B testing on a Google-funded digital learning platform, evaluating the impact of in-person engagement on 4,000+ Kenyan users, increasing users' retention by 27%

Research Associate

Jan. 2021 – Aug. 2021

Innovations for Poverty Action (IPA)

Kigali, Rwanda

- Led a \$803K A/B testing project with 180 maize cooperatives, connecting farmers to processors through the UN WFP Farm to Market Alliance program, resulting in 150%-300% revenue increases
- Designed and implemented survey instruments using SurveyCTO for 3 large-scale randomized evaluations, collecting data from 2,500+ farmers and cooperative leaders across Rwanda
- Managed field teams of 50+ enumerators to ensure high-quality data collection and compliance with research protocols

Equity Data Analyst

Jul. 2017 – Apr. 2018

Morningstar

Shenzhen, China

- Analyzed annual and quarterly financial reports for 300+ publicly listed companies in North America
- Conducted financial performance assessments utilizing DCF, comparable company analysis (CCA), and regression models, resulting in 20+ data-driven investment recommendations
- Utilized SQL window functions, user-defined functions (UDFs), and self-joins to efficiently extract, clean, and analyze financial datasets from relational databases, ensuring data integrity and consistency in reporting

UX Research Project

MilkChain | Python, R, Stata, Machine Learning, Bayesian Models, A/B Testing

Aug. 2021 – Dec. 2024

- Led a cross-functional team of software engineers, data analysts, and field coordinators to develop a digital traceability system monitoring milk movement across 1,200+ farmers, intermediaries, and retailers in Kenya's dairy supply chain
- Designed and implemented machine learning models (Lasso, ElasticNet) in Python to predict milk quality, applying data preprocessing, feature selection, and hyperparameter tuning to optimize model performance
- Developed Bayesian hierarchical models using Markov Chain Monte Carlo (MCMC) algorithms in R, achieving 90%+ prediction accuracy on milk quality classification
- Designed and led a \$148K (independently raised from NSF, MIT/J-PAL, Weiss Fund, etc.) A/B testing project that revealed hidden milk quality information via traceability systems and Bayesian models, reducing milk adulteration by 21.9%

RainDistancing | Python, Stata, GIS, Instrumental Variable (IV)

Apr. 2020 – Jan. 2022

- Processed and integrated large-scale geospatial datasets using QGIS and Python, analyzing mobility patterns across 1,900+ U.S. counties to assess weather-driven behavioral shifts
- Built causal inference models (Instrumental Variable) to quantify the economic and epidemiological effects of mobility changes
- Published findings in the *Journal of Health Economics* (2022), advancing evidence-based pandemic policy design

EDUCATION

University of California, Santa Cruz

Santa Cruz, CA

Ph.D. in Economics, Department of Economics (GPA: 3.95/4.0)

Sep. 2018 - Jun. 2025

- UCSC Chancellor's Dissertation-Year Fellowship (\$54,320) Only recipient from Economics Department in decades
- Annual Award for Excellence in Teaching

University of California, Santa Cruz

Santa Cruz, CA

M.A. in Economics, Department of Economics (GPA: 3.93/4.0)

Jiangxi, China

Jiangxi University of Finance and Economics

Sep. 2013 - Jun. 2017

Sep. 2018 - Dec. 2019

B.S. in Finance, International School (GPA: 93/100, Rank: 2/557) • China National Scholarship by Ministry of Education (Awarded to top 3 among 2,300)

- CFA Program Student Scholarship by CFA Institute