Yiwang Li

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SUMMARY

Education policy researcher and quantitative analyst with extensive experience leading grant-funded studies and teaching advanced quantitative methods. Expert in statistical modeling, machine learning applications in education, and policy evaluation. Proven track record in mentorship, instructional design, and translating complex research into actionable insights.

EDUCATION

Ph.D. in Education Policy Analysis and Leadership

University of California - Riverside • Riverside, CA • 2025 • 3.86

- Dean's Distinguished Fellowship
- Dissertation: A Machine Learning framework to predict college readiness (Dr. Cassandra Guarino)

M.A. in Research, Evaluation, Measurement, and Statistics

University of California - Riverside • Riverside, CA • 2021 • 4.0

B.S. in Education and Public Policy

Minor in Sociology • Pennsylvania State University - University Park • University Park, PA • 2016

- Dean's list

EXPERIENCE

Graduate Researcher

University of California, Riverside **September 2017 - Present, Riverside, CA**

- **Served as the quantitative lead on five major research grants** ($200K–$1.5M), leveraging **large-scale longitudinal datasets** and **advanced statistical methods** to generate **policy insights**.
- **Conducted statistical modeling to evaluate college readiness best practices** across 52 high schools in 23 school districts, assessing program effectiveness (Haynes Foundation-funded).
- **Performed statistical analysis of Common Core Math achievement gaps** in 600+ K-12 schools, identifying disparities and trends for students with disabilities (Haynes Foundation-funded).
- **Utilized survival analysis to examine school mobility patterns** among vulnerable student populations across five CORE districts in California, including LAUSD (IES & NSF-funded).
- **Developed predictive models** to identify key factors influencing **undergraduate CS major pipeline success** at four large California universities (NSF-funded).
- Translated research findings into **data visualizations** and **peer-reviewed publications**, and presented the findings at conferences.

Instructor

University of California, Riverside **June 2021 – June 2023, Riverside, CA**

- **Designed and taught an introductory course on U.S. education policy** (EDUC023), examining major reform movements, policy levers, and stakeholder impacts through critical analysis and discussion. Led 75 students in evaluating contentious policy issues, developing informed perspectives, and crafting professional policy presentations and briefs.
- **Developed and instructed a graduate-level quantitative bootcamp** (GradQuant Summer Statistics and Programming Bootcamp), introducing **descriptive and inferential statistics, data visualization, and statistical software (Excel & R)** for research applications. **Delivered hands-on training** in statistical analysis, equipping 60 students with practical skills to interpret and apply statistical methods.
- **Taught and structured an upper-level undergraduate course on educational research methods** (EDUC118), covering **qualitative, quantitative, and mixed-methods approaches, research design, and ethical considerations**. Mentored 30 students in formulating research questions, designing studies, developing research proposals, and building foundational skills in educational research.
- **Designed and developed online course modules** for an asynchronous learning environment (on Canvas and Blackboard), managing over 4GB of teaching materials.
- **Earned high student evaluations of 4.53/5**, reflecting strong teaching effectiveness and student engagement.

Researcher

Center for Social Innovation **June 2021 - September 2021, Riverside, CA**

- **Developed a comprehensive California higher education bill tracker** (2016–2021), compiling legislative data on voting patterns, policy impacts, and passage timelines to analyze trends in higher education policy.
- **Conducted statistical modeling and predictive analysis on 300+ higher education bills**, identifying key factors influencing legislative success with a 70% accuracy rate in predicting bill passage.
- **Applied sentiment analysis to 500+ web-scraped Twitter posts and media articles** to assess public opinion trends and correlation with legislative outcomes.

Data Analyst

New York City Department of Education (Teacher Effectiveness) **June 2016 – May 2017, New York City, NY**

- **Designed and deployed a high-efficiency calculation tool** that reduced table generation runtime by 99.86% (from 3 days to 2 minutes), significantly enhancing data processing efficiency for citywide reporting.

- **Conducted in-depth analysis of teacher quality data** for over 70K teachers in New York City, leveraging a large aggregated database to generate insights that informed department leadership and program strategy.
- **Developed automated data tracking systems** to monitor teacher quality metrics, streamlining reporting and improving accessibility of key performance indicators.
- **Designed and analyzed feedback surveys** on teacher evaluation calibration, incorporating qualitative and quantitative data from 100+ principals and evaluators to refine rating methodologies.
- **Created team-wide knowledge management guides** and **produced weekly, quarterly, and end-of-semester reports**, supporting data-driven decision-making for program quality management.

Policy Intern

Talent Search – TRIO Programs at Penn State **May 2015 - August 2015, University Park, PA**

- **Drafted the "Need" section of grant proposals** for the U.S. Department of Education's TRIO fund competition, contributing to three awarded proposals totaling $4.7 million in federal grants.
- **Conducted research on economic and educational conditions** in Western Pennsylvania school districts to support data-driven policy recommendations.

Supervisor

Information Technology Service at Penn State **May 2013 – May 2016, University Park, PA**

- **Supervised and led a team of 30+ consultants** at the service desk, managing daily operations to ensure prompt and effective technical support for students, faculty, and staff.
- **Designed and conducted training programs** for new consultants, improving troubleshooting proficiency and service efficiency.
- **Diagnosed and resolved a wide range of hardware and software issues**, including SSD/RAM/GPU upgrades, OS installations, and system optimizations, reducing downtime for users.
- **Collaborated with leadership in weekly supervisor meetings** to optimize support workflows, reducing average ticket resolution time by half.

Lab Assistant

IT Lab Consulting at Penn State **May 2014 - January 2016, University Park, PA**

- **Provided guidance on selecting and integrating multimedia tools**, enhancing instructional effectiveness, and supporting digital learning for students and faculty.
- **Managed and maintained lab equipment across 10+ campus labs**, ensuring seamless operation of PCs, printers, and a one-stop recording booth while minimizing technical disruptions.

Cofounder & Treasurer

Students Together in Education Policy (STEP) **May 2015 - May 2016, University Park, PA**

- **Planned and coordinated events**, such as guest speaker sessions, professional development programs, and graduate workshops, to enhance member engagement and career growth.

Teacher

Ichthus International School **January 2012 - June 2012, Jakarta, Indonesia**

- 1) **Developed and delivered interactive Chinese language lessons**, using engaging teaching strategies to promote active learning. 2) **Conducted parent-teacher meetings, assessed exams, and compiled progress reports**, fostering transparent communication on student performance. 3) **Coached the school soccer team** to encourage teamwork and sportsmanship.

SKILLS

Statistical Software: Stata, Python, R

Statistical Methods: General and Generalized Linear Models, Multilevel Modeling, Longitudinal Analysis, Causal Inference (Applied Econometrics), Predictive (Machine Learning) Modeling, Markov Models

Other Training: Probability Theory, Statistical Inference, Advanced Statistical Methods, Grant Writing & Proposal Development, Qualitative Methodologies, Curriculum Development & Instructional Design, Project & Team Management

Other Tools: Tableau, SPSS, SAS, QGIS, LaTex, Git, PostgreSQL, HTML, Libraries (Keras, Scikit-learn, PyTorch, Tensorflow, Tidyverse)

AWARDS & HONORS

Research Grants

University of California, Riverside • 2025

- Humanities Graduate Student Research (GSR) Grant ($1,000) awarded by the Center for Ideas and Society.
- Research Fund ($1,500) awarded by the EDPAL program at UCR School of Education

Multiple Conference Travel Grants and Awards

AERA, UCR School of Education, GSA • 2024

- For conference presentations (AERA and AEFP) (2021-2025)
- AERA Travel Award by the Data-driven Decision Making (DDDM) in Education SIG (2023)

Graduate Representative

Gates Notes Deep Dive at the Gates Foundation • 2021