Yue 'Luna' Huang

https://luna983.github.io

Email: yuehuang@berkeley.edu
Mobile: (510) 701-3560

RESEARCH INTERESTS

- **Environmental Economics**: Air pollution; Energy policy; Climate change and inequality; Risk and vulnerability.
- **Development Economics**: Public health interventions; Social Networks; Migration.
- **Applied Econometrics and Data Science**: Spatial data analysis; Machine Learning.

EDUCATION

University of California, Berkeley Berkeley, CA
Ph.D. Student in Agricultural and Resource Economics; GPA: 3.8 *Aug, 2016–Present*

- **Selected Courses**: Applied Econometrics; Applied Machine Learning; Microeconomics of Development; Environmental and Resource Economics; Microeconomic Theory I/II; Macroeconomic Theory; Applied Microeconomics; Probability and Statistics.

Peking University Beijing, China
B.S. in Environmental Science; B.A. in Economics; GPA: 3.8 *Aug, 2012–Jun, 2016*

ONGOING PROJECTS

Do Data Matter? Data Manipulation and Air Quality in China
*Advisor: **Solomon Hsiang**, **Michael Anderson**, UC Berkeley* *Aug, 2017–Present*

- **Spatial data analysis and machine learning**: Using gradient boosting machine, we reconstruct high-resolution past air quality data from satellite images.
- **Data manipulation identification and inference**: Exploiting the exogeneous variation of the construction of national air quality monitoring stations across the country, we identify the impacts of improved data quality on compliance with environmental regulations and air quality.

Heterogeneous Treatment Effects in Unconditional Cash Transfers
*Research Assistant for Professor **Edward Miguel**, UC Berkeley* *Aug, 2017–Present*

- **Explore treatment effect heterogeneity in high-dimensional datasets**: Using Wager and Athey's causal forest algorithm, I estimate individual-specific treatment effects in a large unconditional cash transfer in Kenya.

RESEARCH EXPERIENCE

Does Mass Deworming Affect Child Nutrition?
*Research Assistant for Professor **Edward Miguel**, UC Berkeley* *Jun, 2017–Aug, 2017*

- **Meta analysis with Bayesian statistics**: I helped re-estimate and analyze randomized control trials that assessed the effectiveness and cost-effectiveness of deworming interventions in developing countries, with a hierarchical Bayesian model framework.

Peltzman Effects on the Golden Gate Bridge

*Research Assistant for Professor **Michael Anderson**, UC Berkeley*   *Aug, 2016–Jun, 2017*

- **Implement a regression discontinuity design**: We exploit a natural experiment on the Golden Gate Bridge and use high-frequency commercial speed data from INRIX to produce a regression discontinuity estimate for the effects of taking safety measures on speeding behavior.

Reforming Forest Tenure for the Poor

*Advisor: **Jintao Xu**, Peking University*   *2014–2015*

- **Data analysis on tenure reform and agricultural household consumption**: Using a household panel dataset from 2000 to 2010, I test the effects of the tenure reform on households' consumption choices. Results suggest that policies aimed at direct distribution of communal forestlands tend to exclude the extremely poor, whereas formalization of property rights have had significant and positive impacts on their consumption.

Impacts of Forest Tenure Reform on Biodiversity

*Advisor: **Elizabeth Robinson**, University of Reading*   *2015–2016*

- **Data analysis on agricultural productivity and crop choices among poor rural households**: I use a household- and plot-level panel dataset in rural China from 2000 to 2010 to test how farmers' planting and harvesting choices are impacted by tenure arrangements, in particular, tenure security and property rights.

TEACHING EXPERIENCE

Microeconomic Theory with Application to Natural Resources

*Instructor: **Ethan Ligon**, UC Berkeley*   *Aug, 2017–Present*

- **Course content**: Basic economic concepts, supply and demand, market failure, public goods and externalities, regulations.
- **Responsibility**: Prepare section notes, teach weekly sections, help design and grade problem sets.

AWARDS AND GRANTS

Mao Yugang Foundation Grant for Undergraduate Research	*2014*
Academic Creativity Award, Peking University	*2015*
Bajian Rencai Scholarship, Peking University	*2013, 2014, 2015*
Wusi Scholarship, Peking University	*2013, 2014*

SKILLS

Languages: Native in Chinese; Proficient in English.

Programming Skills: Proficient in R, Python and QGIS.