Yue 'Luna' Huang

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Research Interests

Development Economics: Health intervention; Environmental pollution; Early child development; (In-)formal institutions and contracts.
Data Science: Spatial data analysis; Machine learning.
Industrial Organization: Product differentiation; Market power.

Education and Affiliation

University of California, Berkeley   Berkeley, CA
Ph.D. Student in Agricultural and Resource Economics; GPA: 3.7   *Aug, 2016–Present*

Selected Courses:	Development Economics I/II	Environmental Economics I/II
Applied Econometrics	Applied Machine Learning	Industrial Organization
Probability and Statistics	Microeconomic Theory I/II	Applied Microeconomics

Center for Effective Global Action   Berkeley, CA
Research Assistant   *Jan, 2018–Present*

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

Ongoing Projects

Long-term Impacts for Child Health and Cash Transfer Interventions
*Advisor: **Craig McIntosh** and **Prashant Bharadwaj**, UC San Diego*
We hope to construct a database of rigorous child health or cash transfer randomized control trials conducted ten or more years ago for which long-term follow-ups are feasible. We are interested in using satellite data or surveys in the field to assess the impacts and cost-effectiveness of these interventions on health, labor market and consumption outcomes.

Working Papers

Information, Incentives and Air Quality: New Evidence from Machine Learning Predictions
*Joint with **Minghao Qiu**, MIT; Advisor: **Solomon Hsiang**, UC Berkeley*

Abstract: In command-and-control regulations, information asymmetry between central regulators and local agents is often cited as one of the key issues leading to ineffective policies. We provide evidence from China that policies aimed at reducing information asymmetry between central and local government is rather ineffective in improving air quality. This issue has been traditionally hard to examine with administrative and survey data, because credible information on environmental quality were rarely available to researchers before they were available to central regulators. We leverage recent development in machine learning and a rich set of satellite images from NASA and reconstructed a comprehensive air pollution dataset in China with almost half a million observations from 2005 to 2016. We exploit variation in the roll-out of a policy from 2013 to 2015, where treated cities started monitoring and reporting air pollution to upper-level government. We test for structural breaks around the time of policy treatment and find no significant effects. These results have large implications for the recent surge in investments in building the national monitoring network in China.

Research Experience

Heterogeneous Treatment Effects in Unconditional Cash Transfers
*Research Assistant; Advisor: **Edward Miguel**, UC Berkeley*
Using Wager and Athey's causalForest algorithm, I explored a data-driven approach to estimate treatment effects heterogeneity in the large unconditional cash transfer, GiveDirectly in Kenya.

Does Mass Deworming Affect Child Nutrition? Meta-analysis, Cost-Effectiveness, and Statistical Power
*Research Assistant; Advisor: **Edward Miguel**, UC Berkeley*
I helped re-analyze randomized control trials that assessed the effectiveness and cost-effectiveness of deworming interventions in developing countries. I also conducted meta-analysis with a hierarchical Bayesian framework.

Risk Perception and Speeding Behavior
*Research Assistant; Advisor: **Michael Anderson**, UC Berkeley*

Forest Tenure Reform, Property Rights and Inequality in Rural China
*Advisor: **Jintao Xu**, Peking University*

Forest Tenure Reform, Property Rights and Biodiversity
*Advisor: **Elizabeth Robinson**, University of Reading*

Teaching Experience

[EEP 100] Microeconomic Theory with Application to Natural Resources
*2017 Fall, Teaching Assistant; Instructor: **Ethan Ligon**, UC Berkeley*
Course content: Consumer preferences, supply and demand, market failure, public goods and externalities, welfare analysis.

Presentations

UC Berkeley-Davis-Riverside Giannini Foundation Student Conference	*Apr 2018*

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 and Python; Experienced in C++, SQL, STATA, Matlab and QGIS.