

**ENERGY AND ENVIRONMENTAL ECONOMICS, INC.**  
*Senior Associate*

San Francisco, CA

Mr. Jiang joined E3 in 2017 upon receiving a Masters of Science in Engineering in Applied Mathematics and Statistics and also a Masters of Science in Environmental Economics and Policy from Johns Hopkins University. Prior to that, he completed his Bachelors of Science in Chemistry from Peking University in China and did a thesis on *Cost-Benefit Analysis of Pollution Abatement for Coal Burning in China: A Health Perspective*. Mr. Jiang has strong research, presentation and problem-solving skills, and direct and extensive experience using MATLAB, R, Python, GAMS and other technical software. Some E3 projects Mr. Jiang has worked on so far include:

- **Integrated Demand Side Management (IDSM) Tool for Orange and Rockland Utilities, 2017-present.** Developing ORU specific IDSM model to calculate benefits and costs from utilities, customers, and societal perspectives for different distributed energy resources (DER) measures.
- **System Reliability Impact Assessment of Once-Through-Cooling Units for Los Angeles Department of Water and Power (LADWP), 2017-present.** Simulating historical hourly load profile in LADWP back to 1950 based on neural network regression method and analyzing system reliability among many mitigation alternatives with higher renewable penetration via RECAP model.

**JOHNS HOPKINS UNIVERSITY**

**DEPARTMENT OF ENVIRONMENTAL HEALTH AND ENGINEERING**

Baltimore, MD

*Research Assistant, Advised by Prof. Benjamin Hobbs*

September 2016 – June 2017

Mid-Atlantic Regional Integrated Sciences and Assessments (MARISA) Program

Cooperating with RAND Corporation

- Developed and applied tools to rank projected climate-driven risks by the urgency of the decisions.
- Identified the main decision-relevant uncertainties to guide design of decision-support tools and new climate research.
- Wrote up a report for the summary of 34 different specific decisions in Chesapeake Bay Watershed.
- Screened out the decisions with less interests via multi-criterion and multi-objectives analysis.

**DEPARTMENT OF APPLIED MATHEMATICS AND STATISTICS**

Baltimore, MD

*Teaching Assistant for Introduction to Probability Course*

September 2016 – January 2017

- Lectured each week on conference section for the class.
- Graded homework each week and provided comments to students.
- Provided ideas to the questions for students during weekly office hours.

**WORLD BANK GROUP**

Washington, D. C.

## *Research Analyst of Climate Resilient Power System Planning*

Summer 2016

- Revised and developed the optimization model of power system in Bangladesh through GAMS.
- Generated an adaptive strategy for power system in Bangladesh through Robust Decision Making Analysis (RDM).
- Analyzed vulnerability of future states by PRIM algorithm through R and MATLAB.
- Wrote up a report for RDM analysis in Bangladesh power system planning.

## Education

Johns Hopkins University (JHU)

Baltimore, MD

*M.S.E., Applied Mathematics and Statistics*

May 2017

*M.S., Environmental Economics and Policy*

May 2017

Peking University

Beijing, China

*B.S., Chemistry*

July 2015

*Thesis: Cost-Benefit Analysis of Pollution Abatement for Coal Burning in China: A Health Perspective*

## Citizenship

China

## Conferences

Title: Adaptive Strategy for Power System Expansion in Bangladesh  
**10th Annual Trans-Atlantic Infraday Conference**

Washington, D.C.  
November 2016

## Research

**Department of Geography and Environmental Engineering, JHU**

Baltimore, MD

*Advised by Prof. Benjamin Hobbs, Director of JHU E2SHI*

December 2015 – May 2016

Topic: Modeling of the interactions of fertilizer costs and supply with global energy prices

- Collected data of fertilizer and energy prices for different sectors and regions
- Built up different statistical regression models for the interactions between fertilizer and different energy prices
- Applied the statistical models to figure out the mechanism of the interactions

**College of Urban and Environmental Science, Peking University**

Beijing, China

*Advised by Prof. Shu Tao, Dean of the College*

January 2015 – June 2015

Topic: Cost-Benefit Analysis of Pollution Abatement for Coal Burning in China

- Set up the database of coal use in China for recent 20 years
- Led in building the geographic model with 10 million data of coal consumption in China through MATLAB

- Constructed the mathematical model individually to calculate the potential benefit of the policies
- Conducted cost-benefit analysis for health impact of coal use in China

**Department of Land, Air and Water Resources, U.C. Davis**

Davis, CA

*Advised by Prof. Minghua Zhang, AGIS Laboratory*

July 2014 – September 2014

Topic: In search of substitutes for chlorpyrifos pesticides in California

- Set up the database with millions of data on the usage of chlorpyrifos pesticide in CA
- Conducted meta-analysis for the pesticides usage database through R
- Built a model individually for quantifying the environmental effect of pesticides

Improved the methods of using meta-analysis in finding pesticides substitutions