(425) 492-5592 nrlucas@uchicago.edu

EDUCATION

Massachusetts Institute of Technology (MIT)

Cambridge, MA

B.S., Mathematical Economics and Computer Science and Engineering GPA: 4.77/5.00

June 2017

Relevant Coursework

Price Theory II (University of Chicago), Econometrics, Networks, Game Theory, Energy Economics and Policy, Machine Learning, Software Studio, Design and Analysis of Algorithms, Real Analysis, Discrete Mathematics, Linear Algebra

RESEARCH EXPERIENCE

Energy Policy Institute at University of Chicago

Pre-Doctoral Research Fellow

July 2017 - present

- ♦ Aiding Professor Ryan Kellogg with his research in oil and gas firm decision making
- ♦ Used Matlab to model drilling decision making for firms drilling at the height of the shale gas boom in the United States in the early 2010s
- ❖ Developed an understanding in mechanism design theory and contract theory to code the analytic model
- ♦ Calibrated the structural model using R and Stata
- ♦ Used R and Python for spatial analysis of data
- ❖ Transferred the entire work flow over to Github for better version control

MIT Dept. of Economics - National Bureau of Economic Research

Undergraduate Researcher

Nov. 2015 - June 2017

- ❖ Aiding Professor James Poterba on research in retirement savings in the United States focusing on different age profiles of wealth accumulation prior to retirement as well as health shocks to retirement savings
- ♦ Wrote a paper on an independent project consisting of stochastic, dynamic programming simulations to model how the interest rate affects wealth at retirement
- ❖ Developed econometric skills in Stata and worked closely with the Current Population Survey and the Survey of Consumer Finances

University of Washington Dept. of Computer Science Seattle, WA Undergraduate Researcher for Professor Richard Anderson May 2014 - Aug. 2014

- ❖ Created a link between the open source database DHIS2 and the open source software Open Data Kit via Android for the Richard Anderson group
- ♦ Developed an Android survey application using the open source database backend to track the cold chain of vaccinations in Laos

WORK EXPEDIENCE Apple Inc.

Cupertino, CA

Experience Software Engineering Intern

May 2015 - Sept. 2015

- ♦ Fully developed an iOS application (sample) in Swift using the Xcode IDE
- ♦ The sample interactively teaches developers how to fully localize an application
- ♦ Fully localized the sample itself

PUBLICATIONS

MIT Undergraduate Journal of Economics

May 2017

Gasoline Prices and Consumer Behavior in the Secondary Automobile Market

Honors and Awards

IEEE Eta Kappa Nu - MIT Beta Theta Chapter

Sept. 2016

National Honor Society for Electrical Engineering and Computer Science

Robert A. Muh Fund Recipient

May 2016 - Sept. 2016

- ♦ Awarded once per year to an undergraduate at MIT doing research in economics, management, or political science
- ♦ Funded for a summer of research working for Professor James Poterba

Fung Scholarship Recipient

Jan. 2016

❖ Received a scholarship to study abroad for January 2016 in Beijing in an immersive Chinese language program that taught both Chinese policy and history

Software Studio Final Project "Best Overall"

Dec. 2015

- ♦ Worked on a team of four to develop a web application from the ground up
- ♦ Awarded "Best Overall" by Professor Daniel Jackson on the basis of functionality, user experience, and security

ACTIVITIES

Intro. Microeconomics (14.01) Undergraduate Tutor Sept. 2016 - May 2017 Software Construction (6.009) Undergraduate Tutor Feb. 2017 - May 2017

The Battlecode Programming Competition

Jan. 2015

- ♦ Worked on a team of two to develop an artificial intelligence player for a real-time strategy game using the Java programming language
- ♦ Made the artificial intelligence's strategy robust to enemy attacks and changing terrain

MIT NCAA Div. I Rowing

Sept. 2015 - June 2017

MIT NCAA Div. III Cross Country, Track & Field Sept. 2013 - Dec. 2014

SKILLS AND LANGUAGES

Software: Java, Stata, Matlab, R, JavaScript, Python, Swift, JQuery, Mongoose, HTML/CSS, Git

Foreign Languages: Mandarin Chinese - Fluent