Jun Ho Choi

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Education

University of Chicago — Chicago, IL
Overall GPA: 3.91/4.00
Graduate Student-at-Large Program (GPA: 4.00/4.00) — Apr 2021 – Current
M.A. in Computational Social Science, Economics Concentration (GPA: 3.90/4.00) — August 2020
Thesis: Sponsor Preferences and Inventory Optimization in Child Sponsorship Programs
Advisor: Professor Pablo Peña

Princeton University — Princeton, NJ
A.B. in Economics, *with honors (cum laude)* (Major GPA: 3.71/4.00) — June 2018
Certificate Program in Statistics and Machine Learning
Thesis: Expected Future Income and Housing Choices of Young Adults
Advisor: Professor Nobuhiro Kiyotaki

Research Experience

Climate Impact Lab (CIL) & Energy Policy Institute, University of Chicago — Chicago, IL
Research Professional, Pre-doctoral Fellow — Sep 2020 – Current
Supervisors: Professors Solomon Hsiang and Michael Greenstone, and Dr. Ian Bolliger

- Produce 2010-2100 capital stock projections under different Shared Socioeconomic Pathways scenarios
- Develop "SLIDERS," a dataset to be used in assessing global impacts of sea level rise (SLR)
- Diagnose and calibrate "pyCIAM," a platform for projecting SLR-induced damages under various climate scenarios and used in calculating the social cost of carbon due to SLR
- Estimate grid cell-level 30-year return values of maximum sustained wind speeds of tropical cyclones using generalized Pareto distributions and automatic threshold selection
- Prepare graphs for CIL's report to the Interagency Working Group on the Social Cost of Greenhouse Gases

Chicago Experiments Initiative, University of Chicago — Chicago, IL
Part-time Volunteer Research Assistant — Jan 2019 – Mar 2020
Supervisor: Professor John List

- Write web-scraping and machine learning scripts while using matching to deal with data imbalance

Columbia Business School, Columbia University — New York, NY
Columbia Business School Summer Research Intern — May 2019 – Nov 2019
Supervisors: Professors Andrey Simonov and Tomomichi Amano

- Conduct data mining on raw gaming data, used for analyzing potential addictiveness of in-game lotteries

Princeton School of Public Policy, Princeton University — Princeton, NJ
Research Assistant
Supervisor: Visiting Professor Ashoka Mody — Feb 2017 – Jun 2018

- Provide data-wrangling and visualization for the book *EuroTragedy* (2018, Oxford University Press)

Publications and Working Papers

Depsky, Nicholas, Ian Bolliger, Daniel Allen, **Jun Ho Choi**, Michael Delgado, Michael Greenstone, Trevor Houser Solomon Hsiang, Robert E. Kopp. 2021. "An Open Source Modeling Platform for Assessing Global Impacts of 21st Century Sea Level Rise." *Working Paper*.

Peña, Pablo A., and **Jun Ho Choi**. 2021. "Female Representation Among Notable People Born in 1700–2000." *Economics Letters* 206: 1-4.

Awards, Grants, and Fellowships

Pre-Doctoral Fellowship, Energy Policy Institute at the University of Chicago — Sep 2020 – Current
Merit-based scholarship (maximum, $78,664), University of Chicago — Sep 2018 – Jun 2020

Relevant Coursework

(*: *PhD-level*, °: *MA-level*, †: *highest score in the class*)

University of Chicago

Economics	Price Theory sequence (I, II, III)*, Topics Information Economics*, Topics in Theoretical Economics*, Market Design*, Energy in the Developing World°, Energy and Environmental Economics I (in progress)*
Econometrics	Applied Econometrics*, Applied Multivariate Analysis*
Mathematics	Measure and Integration, Introduction to Mathematical Probability†
Computation	Large-Scale Computing for the Social Sciences°, Perspectives on Computational Economics sequence°, Computer Science with Applications sequence°, Algorithms°

Princeton University

Economics	Topics in Macroeconomics, International Monetary Economics, The Economics of Uncertainty†, Political Economy, Economic Inequality and the Role of Government
Econometrics	Econometric Applications†, Econometrics: A Mathematical Approach, Introduction to Quantitative Social Science, Applied Quantitative Analysis
Mathematics	Honors Analysis in a Single Variable, Linear Algebra with Applications, Multivariable Calculus

Technical and Computational Training

Programs and Languages

Experienced: Python, R, Stata, SQL, SPARQL, MS Office, Git, LaTeX, and Shell Scripting
Beginner: Julia, Java, Mathematica, HTML, Stan, and Django

Data and Coding Skills

Database Preparation: SQL and related systems (e.g., MySQL, MariaDB)
Web Scraping and Data Mining: Python modules `beautifulsoup` and `Selenium`
Parallel Computing: Python modules `dask`, `pyopencl` (GPU computing), and `mrjob` (MapReduce)

Research Methods

Applied Econometrics: OLS, WLS, IV, difference-in-differences, survival analysis, and more
Applied Machine Learning: tree-based methods, regularized regressions, latent variable models, and more
Other: applications of MLE, GMM, Monte Carlo methods, basic dynamic programming, and more

Other Information

Languages: Korean (native), English (fluent), Standard Chinese (basic)
GRE score (percentile): verbal 160 (85), quantitative 169 (94), writing 4.5 (80)