

# JUN HO CHOI

choi.junho@columbia.edu ◦ <https://jtschoi.github.io/>

## EDUCATION

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### Columbia University

Ph.D. in Sustainable Development

New York, NY

Sep 2022 – Current

### University of Chicago

Graduate Student-at-Large Program

Chicago, IL

Apr 2021 – Jun 2022

M.A. in Computational Social Science, Economics Concentration

August 2020

Thesis Advisor: Professor Pablo Peña

### Princeton University

A.B. in Economics, *with honors (cum laude)*

Princeton, NJ

June 2018

Certificate Program in Statistics and Machine Learning

Thesis Advisor: Professor Nobuhiro Kiyotaki

## WORKS IN PROGRESS

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“Hidden Environmental and Climate Footprints of Frontier AI: Evidence from Google’s Gemini Training.”

*Presented at:* CU Environmental and Resource Economics Seminar (Sep 2025)

(With Douglas Almond and Anna Papp) “Bitcoin Bites: Ambient pollution and labor market outcomes in Pennsylvania.”

*Presented at:* Columbia SDEV Colloquium (Oct 2024), the Chinese University of Hong Kong (Jan 2025),

Virtual Sustainable Development Seminar (Mar 2025), NBER NY, University of Chicago, The Workshop

in Environmental Economics and Data Science (Apr 2025), University of Tokyo, and Seoul National University (June 2025)

“Weather innovations and weathered roads.”

## WORKING PAPERS

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Björkegren, Daniel, **Jun Ho Choi**, Divya Budihal, Dominic Sobhani, Oliver Garrod, and Paul Atherton. 2025.

“Could AI Leapfrog the Web? Evidence from Teachers in Sierra Leone.” [Link]

*Presented at:* NBER Summer Institute 2025 Digital Economics and Artificial Intelligence.

## PUBLICATIONS

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**Choi, Jun Ho**, Oliver Garrod, Paul Atherton, Andrew Joyce-Gibbons, Miriam Mason-Sesay, Daniel Björkegren.

2023. “Are LLMs useful in the poorest schools? TheTeacher.AI in Sierra Leone.” *NeurIPS’23 Workshop on Generative AI for Education*. [Link]

Depsky, Nicholas, Ian Bolliger, Daniel Allen, **Jun Ho Choi**, Michael Delgado, Michael Greenstone, Trevor Houser,

Solomon Hsiang, Robert E. Kopp. 2023. “DSCIM-Coastal v1.1: an open-source modeling platform for global impacts of sea level rise.” *Geoscientific Model Development* 16: 4331–4366. [Link]

Peña, Pablo A., and **Jun Ho Choi**. 2021. “Female representation among notable people born in 1700–2000.”

*Economics Letters* 206: 1–4. [Link]

## RECENT RESEARCH ASSISTANCE EXPERIENCE

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### School of International and Public Affairs, Columbia University

New York, NY

PhD Research Assistant

May 2025 – current

Supervisor: Jeffrey Shrader

- Conducting ML, econometric, and simulation tasks using financial and weather forecast data

### School of International and Public Affairs, Columbia University

New York, NY

PhD Research Assistant

Aug 2023 – Dec 2024

Supervisor: Daniel Björkegren

- Conducted LLM-related tasks to help assess how generative AI can help teachers in low-income countries

## RECENT RESEARCH ASSISTANCE EXPERIENCE (CONTINUED) \_\_\_\_\_

**Climate Impact Lab (CIL) & Energy Policy Institute, University of Chicago** Chicago, IL  
Research Professional, Pre-doctoral Fellow Sep 2020 – Jul 2022  
Supervisors: Professors Solomon Hsiang and Michael Greenstone, and Dr. Ian Bolliger  
◦ Assessing global impacts of 21st century sea level rise and tropical cyclones, and social cost of carbon

## RECENT TEACHING EXPERIENCE \_\_\_\_\_

Climate Finance (Professors José Scheinkman and Harrison Hong) Spring 2025  
Applying Machine Learning (MA-level; Professor Daniel Björkegren) Spring 2024  
Computing in Context (Professor Adam Cannon) Fall 2023

## AWARDS, GRANTS, AND FELLOWSHIPS \_\_\_\_\_

Doctoral Fellowship, Sustainable Development, Columbia University Sep 2022 – Current  
Fellowship for Research in Pre-Doctoral Fellowship, Energy Policy Institute at the Sep 2020 – Jul 2022  
University of Chicago  
Merit-based scholarship (maximum), University of Chicago Sep 2018 – Jun 2020

## OTHER INFORMATION \_\_\_\_\_

### **Programs and Languages**

Experienced: Python, R, Stata, Matlab, SQL, SPARQL, MS Office, Git,  $\text{\LaTeX}$ , ArcGIS, and Shell Scripting  
Beginner: ENVI, Julia, Java, Mathematica, HTML, Stan, and Django

**Languages:** Korean (native), English (fluent), Standard Chinese (basic)