# JANGHO YANG

University of Waterloo, 200 University Avenue West, Waterloo, ON N2L 3G1 j634yang@uwaterloo.ca

## **CURRENT POSITION**

## Assistant Professor, University of Waterloo

2020 - Present

Department of Management Sciences, Faculty of Engineering

# Research Associate, University of Oxford

2020 - Present

Institute for New Economic Thinking at the Oxford Martin School

## PREVIOUS ACADEMIC POSITION

# Postdoctoral Research Fellow, University of Oxford

2018 - 2020

Oxford Martin Programme on Technological and Economic Change Institute for New Economic Thinking at the Oxford Martin School

### **EDUCATION**

#### Ph.D. in Economics

2015 - 2018

New School for Social Research, New York, NY

Dissertation Title: "Essays on the Statistical Equilibrium Model of Technical Change"

Dissertation Committee: Duncan Foley (Chair), Paulo dos Santos, Mark Setterfield, Deepankar Basu

### Master's in Economics

2013 - 2015

New School for Social Research, New York, NY

### **Bachelor in Western History**

2005 - 2010

Seoul National University, Seoul, Korea

#### RESEARCH INTERESTS

Statistical Methods and Methodology; Firm-level Data Analysis; Information-Theoretic Economics; Technical Change and Economic Growth; Input-Output Network

### TEACHING EXPERIENCE

**Department of Management Sciences, University of Waterloo**: Quantitative Data Analysis (2021-2023); Statistical Methods for Data Analytics (2022-2024); Engineering Economics: Financial Management for Engineers (2021-2023)

Department of Economics, New School for Social Research: Advanced Econometrics (TA and lab consultant, Fall 2017, Spring 2017, Spring 2016)

## **PUBLICATIONS**

- 1. Yang, Jangho, Torsten Heinrich, Julian Winkler, François Lafond, Pantelis Koutroumpis, & J. Doyne Farmer, "Measuring Productivity Dispersion: a Parametric Approach Using the Lévy Alpha-Stable Distribution," forthcoming, Industrial and Corporate Change.
- 2. Strauss, Ilan & **Jangho Yang** (2024), "Corporate Secular Stagnation: Empirical Evidence on the Advanced Economy Investment Slowdown," *Structural Change and Economic Dynamics*.
- 3. Yang, Jangho (2022), "Information-Theoretic Model of Induced Technological Change: Theory and Empirics," *Metroeconomica*.

- 4. Heinrich, Torsten, **Jangho Yang**, & Shuanping Dai (2021), "Levels of structural change: An analysis of Chinas development push 1998-2014," *Journal of Evolutionary Economics*.
- 5. Strauss, Ilan & **Jangho Yang** (2021), "Slowing investment rates in developing economies: Evidence from a Bayesian hierarchical model," *International Review of Financial Analysis*.
- 6. Yang, Jangho & Adrián Carro (2020), "Two Tales of Complex System Analysis: MaxEnt and Agent-Based Modeling," European Physical Journal Special Topics.
- 7. Scharfenaker, Ellis & **Jangho Yang**, (2020), "Maximum Entropy Economics," European Physical Journal Special Topics.
- 8. dos Santos, Paulo & **Jangho Yang** (2020), "Capital Mobility, Quasi-rents, and the Competitive Self-organization of Distributions of Profitability," *Advances in Complex Systems*.
- 9. Yang, Jangho & Luis Daniel Torres Gonzales (2019), "The Persistent Statistical Structure of the US Input-Output Coefficient Matrices: 1963-2007," *Economic Systems Research*.
- 10. Yang, Jangho (2018), "A Quantal Response Statistical Equilibrium Model of Induced Technical Change in an Interactive Factor Market: Firm-Level Evidence in the EU Economies," *Entropy.*
- 11. Yang, Jangho (2018), "Information Theoretic Approaches in Economics," The Journal of Economic Surveys.

### WORKING PAPERS

- 1. Bonwoo Koo, Yang, Jangho & Brian D. Wright, "On optimality of secrecy and scarcity of idea."  $R \mathcal{E} R$
- 2. **Jangho Yang** and Ilan Strauss, "Developing Dynamic Capabilities Through Acquisitions: A patent lens on M&A's impact on Big Tech's technological profile," *Under Review*
- 3. Heinrich, Torsten & Jangho Yang (2022), "Innovation in times of Covid-19." Under Review
- 4. Yang, Jangho, Brian Cozzarin, Sarah Feng, & Torsten Heinrich, "Productivity Dispersion and Investment Slowdown in Canada." *Under Review*
- 5. Yang, Jangho, Luis Daniel Torres Gonzales, Advait Rajagopal, & J. Doyne Farmer, "Economic development and the structure of input-output linkages."

### WORK IN PROGRESS

Sujung Jee, **Jangho Yang**, Torsten Heinrich, and Kejia Zhu, "Did COVID-19 deteriorate gender inequality in technological innovation?"

Bonwoo Koo, Yang, Jangho & Brian Cozzarin, "Gender bias in training in Korea."

Yang, Jangho & Christian Schoder, "Climate uncertainty and firm growth"

Juan Sabucco, Yang, Jangho & Nicola Ranger, "Water Stress-Testing."

#### **AWARDS**

Edith Henry Johnson Memorial Award in Economics, Civil Affairs, And Education 2018 awarded for the dissertation "Essays on the Statistical Equilibrium Model of Technical Change"

Eugene Lang College Social Science Fellowship

2017-2018

Outstanding Graduate Student Teacher Award

2016

New School for Social Research Prize Fellowship full-funding for a PhD program

2015-2018

#### RESEARCH GRANTS

**UW-SSHRC Explore Grant.** \$7,000 CAD Jan 2023 - Dec 2024 (with one year automatic extension). PI: Jangho Yang.

New Frontiers in Research Fund - Special Call. \$241,500 CAD. Feb 2023 - Jan 2026 (with one year automatic extension).

PI: Jangho Yang. Co-PIs: Su Jung Jee, Torsten Heinrich, Kejia Zhu.

International Research Partnership Grant, University of Waterloo. \$20,000 CAD. Mar 2022 - Feb 2023.

PI: Jangho Yang.

Economic Security Project. \$25,000 USD. Mar 2022 - Feb 2023.

PIs: Jangho Yang and Ilan Strauss.

Treasury Board Secretariat, Canada. \$27,000 CAD. Mar 2022 - Feb 2023.

PIs: Jangho Yang and Brian Cozzarin.

Starter Grant, University of Waterloo. \$45,000 CAD.

### CONSULTING EXPERIENCE

Short Term Consultant, World Bank. Jan 2023 - present

# CONFERENCE PRESENTATION

2023	Canadian Economic Association, Winnipeg, Canada
2022	Canadian Economic Association, Ottawa, Canada
2019	Nuffield College Postdoctoral Seminar, Oxford, UK Workshop on Economic Science with Heterogeneous Interacting Agents, London, UK International Input-Output Conference, Glasgow, UK Eastern Economic Association Conference, New York, US
2018	European Association for Evolutionary Political Economy, Nice, France
2017	International Input-Output Conference, Seoul, Korea IIPPE Annual Conference in Political Economy, Berlin, Germany

### PROFESSIONAL SERVICE

Editorial Service

Guest Editor, European Physical Journal Special Topics

Co-editing the special issue on "Maximum Entropy Economics: Foundations and Applications," with Ellis Scharfenaker.

2019 - present

## Referee Service

Oxford University Press, Journal of Economic Growth, Cambridge Journal of Economics, OMEGA, International Journal of Technology Management, Economic Systems Research, European Physical Journal Special Topics, Metroeconomica, International Review of Financial Analysis, Structural Change and Economic Dynamics, Journal of Economic Interaction and Coordination, Journal of Evolutionary Economics, Review of Social Economy, Sustainability, Big Data and Cognitive Computing