

JANGHO YANG

University of Waterloo, 200 University Avenue West, Waterloo, ON N2L 3G1
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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* (2022-2025); *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. Bonwoo Koo, **Yang, Jangho** & Brian D. Wright (2025), “On optimality of secrecy and scarcity of idea,” *Forthcoming, Journal of Economics & Management Strategy*
2. **Yang, Jangho**, Brian Cozzarin, Sarah Feng, & Torsten Heinrich (2025), “Productivity Dispersion and Investment Slowdown in Canada,” *Journal of Evolutionary Economics*.
3. **Yang, Jangho**, Torsten Heinrich, Julian Winkler, François Lafond, Pantelis Koutroumpis, & J. Doyne Farmer (2024), “Measuring Productivity Dispersion: a Parametric Approach Using the Lévy Alpha-Stable Distribution,” *Industrial and Corporate Change*.

4. Strauss, Ilan & **Jangho Yang** (2024), “Testing for secular stagnation in investment rates using a Bayesian multilevel model,” *Structural Change and Economic Dynamics*.
5. **Yang, Jangho** (2022), “Information-Theoretic Model of Induced Technological Change: Theory and Empirics,” *Metroeconomica*.
6. Heinrich, Torsten, **Jangho Yang**, & Shuanping Dai (2021), “Levels of structural change: An analysis of Chinas development push 1998-2014,” *Journal of Evolutionary Economics*.
7. Strauss, Ilan & **Jangho Yang** (2021), “Slowing investment rates in developing economies: Evidence from a Bayesian hierarchical model,” *International Review of Financial Analysis*.
8. **Yang, Jangho** & Adrián Carro (2020), “Two Tales of Complex System Analysis: MaxEnt and Agent-Based Modeling,” *European Physical Journal Special Topics*.
9. Scharfenaker, Ellis & **Jangho Yang**, (2020), “Maximum Entropy Economics,” *European Physical Journal Special Topics*.
10. dos Santos, Paulo & **Jangho Yang** (2020), “Capital Mobility, Quasi-rents, and the Competitive Self-organization of Distributions of Profitability,” *Advances in Complex Systems*.
11. dos Santos, Paulo & **Jangho Yang** (2019), “The persistent and informative distribution of returns on capital,” *Economics and Business Letters*.
12. **Yang, Jangho** & Luis Daniel Torres Gonzales (2019), “The Persistent Statistical Structure of the US Input-Output Coefficient Matrices: 1963-2007,” *Economic Systems Research*.
13. **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*.
14. **Yang, Jangho** (2018), “Information Theoretic Approaches in Economics,” *The Journal of Economic Surveys*.

WORKING PAPERS

1. **Jangho Yang** and Ilan Strauss, “Developing Dynamic Capabilities Through Acquisitions: A patent lens on M&A’s impact on Big Tech’s technological profile,” *R&R in Industrial and Corporate Change*
2. **Yang, Jangho** & Christian Schoder, “Impact of temperature uncertainty on firm growth: A grid-level analysis” *Under Review*
3. Sujung Jee, **Jangho Yang**, Torsten Heinrich, & Kejia Zhu, “Flexibility Stigma and Gender in Innovation: Evidence from Inventors during Lockdown” *Under Review*
4. **Jangho Yang**, Ilan Strauss, & Mariana Mazzucato “Rich-Get-Richer”? Analyzing Content Creator Earnings Across Large Social Media Platforms,” *Under Review*

WORK IN PROGRESS

- Lida Ghasemi, **Jangho Yang**, and Stan Dimitrov, “Green Innovation by Fossil Fuel Companies.”
- Juan Sabucco, **Yang, Jangho** & Nicola Ranger, “Water Stress-Testing.”
- Jose Alejandro Coronado & **Jangho Yang**, “As You Like It: Stochastic Matching in a Cournotian Strategic Market Game.”
- Julia D’Alessandro, **Jangho Yang**, Brian Cozzarin, & Bonwoo Koo, “The Impacts of Risk Tolerance and R&D Expenditure on Profit.”

RESEARCH GRANTS

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.

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

PI: **Jangho Yang**.

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.

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 2015-2018
full-funding for a PhD program

SUPERVISION

Current PhD Students

(Co-supervision indicated by names in parentheses)

Jihae Hwang (Stan Dimitrov), Management Science and Engineering, Aug 2024 – Present

Ho Yi Wong (Bonwoo Koo), Management Science and Engineering, Aug 2024 – Present

Julia DAlessandro (Bonwoo Koo), Management Science and Engineering, Aug 2023 – Present

Wendy de Gomez (Kejia Zhu), Management Science and Engineering, May 2023 – Present

Bolaji Vincent (Stan Dimitrov), Management Science and Engineering, Sep 2021 – Present

Current MASc Students

Yuhan Zhang (Kejia Zhu), Management Science and Engineering, Aug 2024 – Present

Lida Ghasemi (Stan Dimitrov), Management Science and Engineering, May 2023 – Present

Eugene Kayal, Management Science and Engineering, Jan 2025 – Present

Current Undergraduate Research Assistants

Bhuvnesh Nagpal, Software Engineering, Sep 2024 – Dec 2024 (Presidents Research Award, URA)

Nina Do, Systems Design Engineering, Sep 2024 – Dec 2024 (Presidents Research Award, URA)

Previous PhD Students

Kirsten Wright (Sean Geobey), Systems Design Engineering, Sep 2021 – 2024 (Graduated)

Previous Undergraduate Research Assistants

Joanna Yang, Management Science and Engineering, Sep 2023 – Dec 2023 (NSERC-USRA)

Mick Wang, Computer Science, May 2023 – Aug 2023 (NSERC-USRA)

Fuyang Deng, Mathematical Finance, May 2023 – Aug 2023 (NSERC-USRA)

Edward Jeong, Management Science and Engineering, Jan 2023 – Apr 2023 (ENG URI)

Elisha Matharu, Computer Engineering, Jan 2023 – Apr 2023 (ENG URI)

Samantha Raven Kobes, Biochemistry, Jan 2021 – Apr 2021 (URA)

Hao Xiang Bian, Actuarial Science & Statistics, Jan 2021 – Apr 2021 (URA)

CONSULTING EXPERIENCE

Short Term Consultant, World Bank. 2023 - 2024

CONFERENCE PRESENTATION

- 2025** Canadian Economic Association, Montreal, Canada
- 2024** Info-Metric Workshop, Washington D.C., US
- 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

2019 - 2020

Guest Editor, European Physical Journal Special Topics

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

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