# **Sukjin Han**

sukjin.han@gmail.com
https://sukjinhan.com

# **Professional Appointments**

2020-present	Professor of Economics, School of Economics, University of Bristol, UK
2012-2020	Assistant Professor, Department of Economics, University of Texas at Austin
2019–2020	Visiting Faculty, Department of Economics, Rice University
Spring 2018	Commander, Hawaii Space Exploration Analog and Simulation, NASA and University of Hawaii
Spring 2016	Visiting Faculty, Cowles Foundation, Yale University

#### **Education**

2012	Ph.D., Economics, Yale University
2009	M.A. / M.Phil., Economics, Yale University
2005	B.A. (with highest honors), Economics, Seoul National University

# **Research Interests**

Econometric Theory, Applied Econometrics

Treatment Effects and Program Evaluation, Treatment Choices, Nonstandard Inference

Machine Learning, Visual and Text Data

# **Grants, Awards and Fellowships**

2022-2023	Principal Investigator, The British Academy / Leverhulme Small Research Grant, approx. USD 13K
2022-2023	Principal Investigator, FSSL Strategic Research Fund, approx. USD 7.2K
2022	Principal Investigator, QR Strategic Priorities Fund, UK Research & Innovation, approx. USD 10K
2021-2022	General Research Fund, School of Economics, University of Bristol
2012–2019	Fellow of R. J. Gonzalez Regents Chair in Economic Progress Based on Freedom & Private Enterprise
2018	Summer Research Assignment Award, UT Austin
2017	Department Summer RA Funding, UT Austin
2011–2012	Carl Arvid Anderson Prize Fellowship, Cowles Foundation
2012	Dissertation Fellowship, Yale University
2008	National Science Foundation Graduate Research Fellowship
2006–2010	Cowles Foundation Fellowship, Yale University

#### **Published and Forthcoming Papers**

- "Optimal Dynamic Treatment Regimes and Partial Welfare Ordering"

Journal of American Statistical Association, Forthcoming

- "Multiple Treatments with Strategic Interaction" with Jorge Balat

Journal of Econometrics (2023), Volume 234, pp. 732-757

- "Comment: Individualized Treatment Rules Under Endogeneity"

Journal of American Statistical Association (2021), Volume 116, pp. 192-195

- "Identification in Nonparametric Models for Dynamic Treatment Effects"

Journal of Econometrics (2021), Volume 225, pp. 132-147

- "Nonparametric Estimation of Triangular Simultaneous Equations Models under Weak Identification"

*Quantitative Economics* (2020), Volume 11, pp. 161-202

- "Estimation and Inference with a (Nearly) Singular Jacobian" with Adam McCloskey

Quantitative Economics (2019), Volume 10, pp. 1019-1068

- "Estimation in a Generalization of Bivariate Probit Models with Endogenous Regressors" with Sungwon Lee *Journal of Applied Econometrics* (2019), Volume 34, pp. 994-1015
- "Censored Quantile Instrumental Variables Estimation with Stata" with Victor Chernozhukov, Ivan Fernandez-Val, and Amanda Kowalski

Stata Journal (2019), Volume 19, pp. 1-14

- "Identification in a Generalization of Bivariate Probit Models with Endogenous Regressors" with Edward Vytlacil *Journal of Econometrics* (2017), Volume 199, pp. 63-73
- "How Would Information Disclosure Influence Organizations' Outbound Spam Volume? Evidence from a Field Experiment" with She He, Gene Moo Lee, and Andy Whinston

Journal of Cybersecurity (2016), Volume 2, pp. 99-118

- "Invalidity of the Bootstrap and the m out of n Bootstrap for Confidence Interval Endpoints Defined by Moment Inequalities" with Donald Andrews

Econometrics Journal (2009), Volume 12, pp. S172-S199

#### **Working Papers**

- "Sharp Bounds on Treatment Effects for Policy Evaluation" with Shenshen Yang (Revise & Resubmit, Journal of Econometrics)
- "Shapes as Product Differentiation: Neural Network Embedding in the Analysis of Markets for Fonts" with Eric Schulman, Kristen Grauman and Santhosh Ramakrishnan (Submitted)
- "On Quantile Treatment Effects, Rank Similarity, and the Variation of IVs" with Haiqing Xu
- "Semiparametric Models for Dynamic Treatment Effects and Mediation Analyses with Observational Data" with Sungwon Lee
- "Testing for Information Structure under Bayes Correlated Equilibrium" with Hiro Kaido, Lorenzo Magnolfi and Camilla Roncoroni

# **Selected Work in Progress**

- "Inference on Welfare for Selected Treatment Rules That Are Set-Identified" with Adam McCloskey
- "Individualized Treatment Choice with Distributional Welfare" with Yifan Cui
- "Identification of Treatment Effects Under Copula Invariance" with Victor Chernozhukov, Ivan Fernandez-Val and Kaspar Wuthrich
- "Endogenous Product Entry in the Space of Visual Characteristics" with Kyungho Lee
- "Effects of New Good Entry in Complementarity Markets: The Case of Font Market" with Matt Shum
- "Dynamic Roy Models" with Xiaohong Chen and Edward Vytlacil

# **Presentations**

-	•	<b>a</b> •
n	$m$ t $\alpha$	Commore
ш	nicu	<b>Seminars</b>

Jul 2019

Invited Seminar	S
2023	U of Oxford, UC Irvine (planned), Cardiff U (planned)
2022	Harvard U, MIT, U College London, U of Amsterdam, U of Colorado Boulder, UC Riverside
2021	London School of Economics, KAIST, Sogang U
2020	U College London, U of Toronto, Simon Fraser U, Rutgers U, U of Illinois Urbana-Champaign, Rice U,
	U of Florida, U of Bristol, Queen Mary U London
2019	Rice U, Boston College, U of Bristol, Singapore Management U, National U of Singapore, U of
	Nebraska
2018	U of Chicago, Penn State U, U of Southern California, Indiana U, U of Rochester, National U of
	Singapore, Seoul National U
2017	Duke U, U North Carolina, Boston U, Xiamen U, Seoul National U
2016	Yale U, U of British Columbia, Brown U
2014	Texas A&M
2013	U of British Columbia, Ohio State U, Korea U, Sogang U
2012	U of Chicago Booth, SUNY Albany, U of Notre Dame, UT Austin, Sogang U, Sung Kyun Kwan U,
	Yonsei U
2008	MIT, Harvard U
Conferences	
Jul 2023	International Panel Data Conference, Amsterdam (planned)
Jun 2023	IAAE Annual Conference, Oslo (planned)
Mar 2023	Warwick-Turing Economics Data Science Workshop
Jan 2023	NAWM of the Econometric Society, New Orleans
Dec 2022	Computational and Methodological Statistics, London
Aug 2022	CeMMAP/SNU, Seoul; Joint Statistical Meeting, DC
Jun 2022	NASM of the Econometrics Society, Miami; IAAE Annual Conference, London
Nov 2021	Southern Economic Association Annual Meeting (virtual)
Jul 2021	International Panel Data Conference (vitual)
Jun 2021	Cowles Summer Conferences, Yale University (virtual), NASM of the Econometrics Society (vitual),
	Asian Meeting of the Econometric Society (vitual), EcoStat Conference (vitual)
Apr 2021	Royal Economic Society Conference (virtual)
Jan 2021	NAWM of the Econometric Society (virtual)
Dec 2020	European Winter Meeting of the Econometric Society (virtual)
Nov 2020	Southern Economic Association Annual Meeting (virtual)
Aug 2020	World Congress of the Econometric Society (virtual), KAEA Virtual Seminar Series, KER
	International Conference (virtual)
Jan 2020	NAWM of the Econometric Society, San Diego, CA
Nov 2019	Southern Economic Association Annual Meeting, Fort Lauderdale, FL
Oct 2019	Midwest Econometrics Group, Ohio State University
Aug 2019	KER International Conference, Seoul, Korea

Bristol Econometrics Study Group, Bristol, UK

Jun 2019	CeMMAP & WISE conference, Xiamen, China; Asian Meeting of the Econometric Society,
	Xiamen, China
Mar 2019	Workshop on "Personalized Treatment: Learning and Decision," London, UK
Feb 2019	Texas Econometrics Camp, Dallas
Jun 2018	Asian Meeting of the Econometric Society, Seoul, Korea; International Panel Data Conference,
	Seoul, Korea; China Meeting of the Econometric Society, Shanghai, China
Jan 2018	NAWM of the Econometrics Society, Philadelphia
Oct 2017	Midwest Econometrics Group, Texas A&M
Jun 2017	IAAE Annual Conference, Sapporo, Japan; NASM of the Econometrics Society, St. Louis
Apr 2017	Conference on Econometrics and Models of Strategic Interactions, CEMMAP UCL & Vanderbilt
Sep 2016	Interactions Conference, Northwestern University
Jun 2016	NASM of the Econometrics Society, Philadelphia; IAAE Annual Conference, University of Milan-
	Bicocca, Milan, Italy
Feb 2016	Texas Econometrics Camp, Houston
Jan 2016	NAWM of the Econometrics Society, San Francisco
Aug 2015	World Congress, Montreal, Canada; Frontiers of Theoretical Econometrics, Konstanz, Germany
Feb 2015	Texas Econometrics Camp, Houston
Sep 2014	Midwest Econometrics Group, University of Iowa
Aug 2014	KAEA Econometrics Summer Camp
Feb 2014	Texas Econometrics Camp, Houston
Jun 2013	Cowles Summer Conferences, Yale University; NASM of the Econometrics Society, USC
Feb 2013	Texas Econometrics Camp, Austin
Oct 2008	CIREQ Conference on Inference with Incomplete Models, Montréal

### **Referee Service**

American Economic Review, Econometrica, Journal of the American Statistical Association, Quantitative Economics, Journal of Econometrics, Review of Economics and Statistics, Journal of Business and Economic Statistics, Journal of Applied Econometrics, Econometric Theory, Econometric Reviews, International Economic Review, Oxford Bulletin of Economics and Statistics, American Journal of Preventive Medicine, Electronic Journal of Statistics, Journal of Econometric Methods, Journal of Human Resources, Australian and New Zealand Journal of Statistics, Econometrics, Korean Economic Review, Hacettepe Journal of Mathematics and Statistics, National Science Foundation

#### **Student Advising**

#### PhD (\*main advisor)

- \*Oska Sheldon-Fentem (current student), ESRC Fellowship Winner
- \*Stuart Lane (current student), ESRC Fellowship Winner
- \*Eric Schulman (2022, Congressional Budget Office)
- \*Shenshen Yang (2021, Tianjin University)

Xinchen Gu (2018, Boston Consulting Group)

Sungwon Lee (2018, National University of Singapore)

Peter Toth (2018, University of Nevada)

Gene Moo Lee, Computer Science, (2015, University of British Columbia)

#### **Masters**

Nish Dave (2021, Associate Data Scientist, De Beers)

#### **Undergraduate Honors**

Jordan Youngblood (2019), Lizzy Tan (2018), Dongsuk Jung (2017), Joonghyun Chin (2013), Nisma Bahaji (2013)

#### **Teaching**

#### **University of Bristol**

\*Nominated for Inspiring and Innovative Teaching Award 2023

Spring 2021-23 (Graduate) Econometrics II

Spring 2021-23 (Graduate) Data Science for Economics: Introduction to Machine Learning

#### **Rice University**

Spring 2020 (Undergraduate) Applied Econometrics

Fall 2019 (Graduate) Econometrics I

# **University of Texas at Austin**

\*Highest-Rated Instructor at Department of Economics in 2019

Spring 2013–19 (Undergraduate) Introduction to Econometrics

Fall 2018 (Undergraduate) Advanced Econometrics: Causal Inference and Machine Learning

Fall 2014–17 (Graduate) Advanced Econometric Theory II

Fall 2013 (Graduate) Topics in Econometrics

#### **Other Creative Work**

"Font Market Analysis from an Economic Perspective" Conversation in LetterSeed (2021), Volume 20

"Where the Sun Sets Blue" Artist publication and sculptures based on the experience in the simulated Mar mission, with visual artist Felicitas Rohden (2020)

"Cubic Interaction" 3D object, which is itself a puzzle, that visually represents economic agents' strategic interaction, with designer Jiwon Park (2021)

"Altered Angles—Mars Mission" Art installation based on my experience with the simulated Mar mission, with visual artist Felicitas Rohden, Exhibited at *Kunst & Denker Contemporary Art Gallery*, Düsseldorf, Germany (2018)

"Crossing Dimensions" Developing a series of architectural environments that invoke experience of shifting dimensions, with composer Seoyoon Kim (2017)

#### **Other Professional Activities**

2023	3	Member of Program Committee, IAAE
202	1–2022	Co-Organizer, Bristol Econometric Study Group Conference
2007	7	Summer Intern, Office of Economic Analysis, Securities and Exchange Commission
200	5–2006	Researcher, Korea Fixed Income Research Institute
2000	0-2002	Administrative Specialist, Korean Army

# Skills

Python, Matlab, Stata (programming), Gauss, LaTeX (with TikZ), Adobe Illustrator/InDesign, Rhinoceros

Last updated: April 2023