Tom (Hyeon Seok) Yu

Contact Information

Stanford Graduate School of Business
655 Knight Way BC 234H
Stanford, CA 94305

Phone: (717)462-8204
Email: thyu538@gmail.com
Website: tomhsyu.com

Education

Stanford University Stanford, CA
Ph.D. in **Political Economy** 2017-2019, 2021-2023 (December Expected)
Dissertation Committee Members: *Neil Malhotra, Ken Shotts, David Broockman*
M.S. in **Statistics** 2021-2023
Primary Advisor: *Percy Liang*

Middlebury College Middlebury, VT
B.A. in **Economics**, minor in Political Science, *Summa Cum Laude* 2012-2016
Class Salutatorian

Skills

Programming: R, Python (Advanced), Spark SQL, Mathematica, Stata, C++ (Intermediate)
Markup / Visualization: LaTeX, Markdown, Adobe InDesign

Employment

Experimentation and Causal Inference Intern, Netflix Los Gatos, CA; Summer 2023
· Developed methods for mitigating non-response bias (via inverse propensity score weighting methods) and improving the representativeness (via raking and entropy balancing) of the survey data.
· Implemented ML models trained to predict survey ratings from users, the prediction of which was leveraged to guide business decisions on objective quality metrics.
· Collaborated with engineering and design stakeholders from various sister teams for refining and applying survey-based metrics.
· Received the hiring recommendation.

Teaching Assistant, Stanford University Stanford, CA; 2021-Present
· Constructed course materials on topics in microeconomics and game theory for PhD and MBA students and received a median TA rating of 5.0/5.0.

Summer Associate, Yozma Group (VC) Seoul, Korea; Summer 2019
· Spearheaded the launch and conducted due diligence for an international fund ($200M USD) with a portfolio of startups in Israel, South Korea, and China.
· Drafted and presented the investment memo for LPs including the National Pension Service in South Korea.

Analyst, Analysis Group (Econ. Consulting) Denver, CO; Summer 2015, 2016-2017
· Applied econometric and causal inference methods (Diff-in-Diff and IV) to address the client's request to identify the macroeconomic benefits facilitated by their core product in Latin American countries.
· Conducted over 150 hours of due diligence for an intellectual property case and implemented a PDF-scraping method on Python to expedite the computation of profit damages.

Research Interests

Causal Inference, Experiment Design, Machine·Reinforcement Learning, Survey Research Methods, Game Theory

WORKING PAPERS	**Finding the Best Arm: Multi-Armed vs. Contextual Bandits** with *Apoorva Lal* Adaptive Survey Experiment, Bandit Algorithms, Best-Arm Identification
	Electoral Insecurity & Federal Spending Procurement: Causal Inference with Panel Matching and Synthetic Control Methods Panel Matching, Synthetic Control Methods, Difference-in-Differences
	Status Perception and Populism among Low & Middle-Income White Americans Formal Theory, Randomized Survey Experiment
	Predicting Roll Call Votes using Machine Learning Methods with *Floyd Jiuyun Zhang* US Congress Roll Call Votes, Machine Learning – Ensemble Method

TEACHING EXPERIENCE	**GSBGEN 675: Microeconomic Theory (Ph.D.)**	Fall 2021, 2022

Ph.D. level course based on material from Mas Colell & Whinston & Green (MWG).
Instructor: Prof. **Dana Foarta**
Median (Average) student rating of TA: 5.0 (4.9) / 5.0

POLISCI 153Z: Strategy – Introduction to Game Theory	Summer 2022

Undergraduate level game theory course that covered basic concepts from Nash equilibrium to perfect Bayesian equilibrium.
Instructor: Prof. **Avidit Acharya**
Median (Average) student rating of TA: 5.0 (4.5) /5.0

MGTECON 200: Managerial Economics (MBA)	Winter 2022

MBA introductory microeconomic theory course that covers demand, auction, moral hazard, adverse selection, and game theory.
Instructor: Prof.**Weijie Zhong**
Median (Average) student rating of TA: 5.0 (4.6) / 5.0

SERVICE TO THE JOURNALS	Referee for: *American Journal of Political Science, Research & Politics*

MILITARY SERVICE	**Republic of Korea Air Force**	Seongnam, Korea
	Enlistee Representative, Airbase Commander's Office	2019-2021

FELLOWSHIPS, HONORES, AND GRANTS	Stanford American Democracy Fellowship Award ($2K)	2023
	Stanford Ethics, Society, and Technology Hub Research Grant ($10K)	2023
	Institute for Humane Studies Research Grant ($2.5K)	2023
	Stanford GSB PhD Fellowship	2017-19, 2021-Present
	Phi Beta Kappa	2015