Kyohei Okumura

Personal Data

Address	2211 Campus Dr, Evanston, IL 60208, United States
Email	kyohei.okumura@gmail.com
Web site	https://okuchap.github.io/

Education

August 2020–	Ph.D. program in Economics, Northwestern University
March 2019	M.A. in Economics, The University of Tokyo
	Thesis: Border Patrolling Games with Multiple Agents
	Advisor: Hitoshi Matsushima
March 2017	B.A. in Economics, The University of Tokyo
2015–2016	Exchange Student in Economics, HEC Paris, France

Research Interests

Market Design, Microeconomic Theory

Publications

"Counterfactual Learning with General Data-generating Policies", forthcoming in *the proceedings of the 37th AAAI Conference on Artificial Intelligence (AAAI-2023)*, 2023. (joint with Kohei Yata, Yusuke Narita, and Akihiro Shimizu)

"An Economic Analysis of Difficulty Adjustment Algorithms in Proof-of-Work Blockchain Systems", *the 21st ACM Conference on Economics and Computation (EC'20)*, 611, 2020. (joint with Shunya Noda and Yoshinori Hashimoto)

"A Simple, Fast, and Safe Mediator for Congestion Management" (joint with Kei Ikegami and Takumi Yoshikawa), *the proceedings of the 34th AAAI Conference on Artificial Intelligence (AAAI-2020)*, 2030-2037, 2020.

Working Papers

"Regulating Matching Markets with Constraints: Data-driven Taxation" (joint with Akira Matsushita, Kei Ikegami, Yoji Tomita, and Atsushi Iwasaki)

"Border Patrolling Games with Multiple Agents" (joint with Akitoshi Kawamura)

Relevant Positions

2022	Research Assistant for Bruno Strulovici
2021–22	Research Assistant for Annie Liang
2021–	Research Assistant, The University of Tokyo Market Design Center
2020	Research Fellow (DC2), Japan Society for the Promotion of Science (JSPS)
2019	Research Internship, 2019 RIKEN R-CCS HPC Computational Science Internship Program
2019–2020	Research Assistant for Daisuke Oyama
	Contribute to Quantecon. [Link]
2017–20	Trainee (Scholarship Student), Center for Research and Education in Program Evaluation (CREPE), University of Tokyo
2017	Research Assistant for Kohei Kawaguchi, Toshifumi Kuroda, and Takanori Ida
	Wrote code for the demand estimation of Japanese telecommunication industry using R.

Teaching Experience

Instructor

Summer 2019	Math Camp (optimization theory, graduate), Spring and Fall 2018, University of Tokyo
Autumn 2019	Taught the theory and computational methods of optimization.

Teaching Assistant, The Universtity of Tokyo

Autumn 2019	Microeconomics II, Instructor: Michihiro Kandori
Summer 2019	Game Theory, Instructor: Michihiro Kandori
Spring 2018	Microeconomics I, Instructor: Daisuke Oyama
Autumn 2017	Mechanism Design, Instructor: Hitoshi Matsushima

Honors and Fellowships

2020-	**The Nakajima Foundation Overseas Scholarship**
2020-	**Grant-in-Aid for JSPS Fellows**, Japan Society for the Promotion of Science (JSPS)
August 2019-	**MITOU Advanced Program**, "CRAB: Congestion Management via Mechanism Design and Machine Learning", Grant: JPY 10,000,000 (approx. USD 91,500)
	The MITOU Advanced Program is for promoting and supporting IT entrepreneurship in Japan. Experts from academic, technology and business communities work with aspiring entrepreneurs to help them launch new IT businesses, providing guidance and advice on how to design new products and services, as well as on how to improve prototypes. [Link]
March 2019	**Best Student Paper Award**, IEICE Technical Committee on Theoretical Foundations of Computing (COMP), "Border Patrolling Games with Multiple Agents"

Conference Presentation

July 2020	The 21st ACM Conference on Economics and Computation (EC'20), Virtual Place
May 2020	Spring Meeting of Japanese Economic Association, Virtual Place
March 2020	IEICE Technical Committee on Theoretical Foundations of Computing, Virtual Place
February 2020	The 34th AAAI Conference on Artificial Intelligence (AAAI-20), New York
August 2019	Econometric Society Summer School in Sapporo, Hokkaido University
March 2019	IEICE Technical Committee on Theoretical Foundations of Computing (COMP), Waseda University

Seminar Presentation

December 2019	The 5th Workshop on Self-Organization and Robustness of Evolving Many-Body Systems, RIKEN Center for Computational Science
October 2019	Microeconomics Workshop, University of Tokyo
February 2019	Foundations of Computing Seminar, Kyushu University
January 2019	Microeconomics Workshop, University of Tokyo

Computer Skills

Python, R, C++

Github: https://github.com/okuchap