

Hiroki Oda

PhD Student, Annenberg School for Communication and Journalism
University of Southern California

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Research interests: Computational social science; organizational communication; human-machine interaction; social network analysis; causal inference; experiments.

Education

PhD Communication — Annenberg School for Communication and Journalism, University of Southern California
Supervisor: Dr. Marlon Twyman.
Annenberg Fellowship (five-year full funding). 2026 – Present

MSc Applied Social Data Science (with Distinction) — London School of Economics and Political Science
Supervisor: Dr. Milena Tsvetkova. 2023 – 2024
Modules: Computer Programming; Social Science Research Design; Managing and Visualising Data; Applied Machine Learning for Social Science; Causal Inference for Observational and Experimental Studies; Social Network Analysis.

BA Sociology — The University of Tokyo
Supervisors: Prof. Sawako Shirahase, Prof. Kazuo Seiyama, Prof. Takeshi Deguchi.
Exchange program: Durham University (2017 – 2018). 2015 – 2020

Research Experience

Field experiments of social influence and contagion with AI-assisted bots 2024 – 2026
Research Assistant with Dr. Milena Tsvetkova, HUMANET Lab, LSE (2024 – 2025).

- Designed and implemented a field experiment on Reddit to investigate social influence and contagion from artificial agents, using bot and human accounts administering symbolic awards with varied rationales.
- Developed a Python-based data pipeline (Reddit API, SQLite, MongoDB) and integrated GPT-4o for content screening.
- Conducted statistical and sentiment analysis (LIWC) of behavioral changes in recipients.

Algorithmic influence on music genre taste in digital music platforms 2023 – 2024
MSc dissertation, LSE Department of Methodology (Distinction).

- Conducted a Spotify field experiment on how recommendation algorithms shape cultural tastes, measured via variety and atypicality using a co-genre network (3,824 nodes, 46,711 edges).
- Combined Bourdieu's cultural capital framework with computational methods (ANOVA, Tukey's HSD).

Empirical analysis of educational assortative mating in Japan

BA dissertation, The University of Tokyo (Krone Award for best thesis).

- Analyzed mechanisms of educational assortative mating from quantitative and qualitative perspectives, including dating app dynamics.

Publications & Manuscripts

PREPRINTS

Oda, H., Makovi, K., Yasseri, T., & Tsvetkova, M. (2026). A field experiment of social influence and behavioral contagion with bots on Reddit. *arXiv:2607.00854* [cs.SI]. <https://doi.org/10.48550/arXiv.2607.00854>

WORK IN PROGRESS

Oda, H. Algorithmically created cultural tastes: How recommendation algorithms in digital platforms control individuals' music tastes.

Conference Presentations**"Social influence and behavioral contagion: A Reddit bot field experiment"**

Jul 2025

Oda, H., Makovi, K., Yasseri, T., & Tsvetkova, M.

Oral presentation — 11th International Conference on Computational Social Science (IC2S2), Norrköping, Sweden.

"Algorithmically Created Cultural Tastes: How Recommendation Algorithms in Digital Platforms Control Individuals' Music Tastes"

2024 – 2025

Oral presentation — CS2 Italy Conference, Trento, Italy (Jan 2025).

Poster presentations — IC2S2, Norrköping, Sweden (Jul 2025); INSNA Sunbelt, Edinburgh, UK (Jun 2024).

Professional Experience**Intern** — Sakana AI, Tokyo

Jul 2026 – Aug 2026

LLM-based product development for applications in the financial industry.

Senior Data Scientist — EY Japan, Tokyo

Aug 2025 – Jul 2026

Causal inference and machine learning projects for clients across multiple industries.

Research Assistant — London School of Economics, London

Aug 2024 – Jul 2025

Led a Reddit field experiment on human-machine interaction and social influence.

Data Analyst — CADDi Inc., Tokyo

Mar 2022 – May 2023

Developed cost-estimation algorithms for metal-parts manufacturing and led the project.

Business Strategy Consultant — Accenture Japan, Tokyo

Apr 2020 – Feb 2022

Mid-term strategy and operating-model transformation projects for manufacturing and electronics clients.

Scholarships & Fellowships

Annenberg Fellowship — University of Southern California
Five-year full funding for PhD studies (tuition + stipend).

2026 – 2031

JASSO Scholarship for Study Abroad — Japan Student Services Organization
Approx. \$28,500/year (JPY 380,000/month) for doctoral study abroad.

2026 – 2029

Awards

Krone Award — The University of Tokyo, Department of Sociology
Best dissertation of the year.

Mar 2020