

# TAKAHIRO ODA

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https://taka-oda.github.io/

## RESEARCH INTERESTS

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My research lies at combining of artificial intelligence and machine learning with social science and philosophy to create a combination that can be integrated into policy and business in order to design an unforeseen version of society. Especially I am interested in applying counterfactual policy evaluation and data-driven mechanism design to public issues, using human behavioral data obtained from interactive systems.

My work is situated at the intersection of computing, communities, and constructionism.

## EDUCATION

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**California Institute of Technology** Pasadena, CA  
*Ph.D. Student in Computer Science* expected from September 2022

Research Field: Economics and Computation, Machine Learning, History

**Keio University** Tokyo, Japan  
*Bachelor of Economics* April 2018 – March 2022

## EXPERIENCE

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**Squirrel AI Learning by Yixue Group** Shanghai, China  
*Research Partner (under an outsourcing agreement)* April 2020 – November 2021

Work on the research and practice of data-driven STEM education.

**Carnegie Mellon University** Pittsburgh, PA  
*Research Experience for Undergraduates* February 2020 – November 2021

Research on sourcing student open-ended solutions to create scalable learning opportunities under a supervision of Prof. Kenneth R. Koedinger.

**atama plus, Inc.** Tokyo, Japan  
*Research and Development Intern* June 2019 – Present

Work on development and implementation of AI-based educational applications.

## INVOLVED PROJECTS

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**Policy Garage** – is a Japanese NPO that accelerates independent projects for open innovation in public policies of Japanese local governments. A regular technical contributor and advisor since March 2021.

**Open Bandit Project** – is an open-source research project that aims to enable realistic and reproducible experiments on bandit algorithms and their off-policy evaluation. The project consists of a large-scale real-world dataset called Open Bandit Dataset and Python software called Open Bandit Pipeline. Awarded: **The Prime Minister's Award for Open Innovation** by the Japanese Government.

**LearnLab** – is originally funded by *the National Science Foundation*, and it leverages cognitive theory and computational modeling to identify the instructional conditions that lead to robust student learning. A regular contributor at *the Cognitive Factors Research Thrust* since 2020.

## PROFESSIONAL SERVICES

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**Conference Program Committee**  
ICLR 2022, WSDM 2022, NeurIPS 2021, AISTATS 2021, EC 2022.

## EXTRACURRICULAR ACTIVITIES

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### GEIL 2018~2019

*May 2018 – September 2019*

Organized Japan's largest *Policy Making Contest for college students*. Designed, arranged and facilitated discussions on issues such as health inequities, intercultural society, and Japan's nuclear waste problem.

### JENESYS 2019~2020

*February 2020, March 2021*

A people-to-people exchange program between Japan and the Asia-Pacific region, sponsored by *the Ministry of Foreign Affairs of Japan*. Contributed from designing the discussion on foreign workers' problem to facilitating it at *Japan-ASEAN Student Conference 2019 and 2020*.

## LANGUAGES

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Japanese(native), English(TOEFL iBT: 104)

## REFERENCES

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Available upon Request.

Last Updated: January 24, 2022