

[PRESS RELEASE]

March 17, 2023
Fujitsu Limited
Ochanomizu University

Fujitsu and Ochanomizu University establish new AI ethics research lab, leveraging AI technologies to promote gender equality

Tokyo, March 17, 2023 - Fujitsu and Ochanomizu University today announced the establishment of the "Fujitsu-Ochanomizu University Social Collaboration Program for AI Ethics", a new joint research laboratory to develop AI solutions contributing to the solution of gender equality issues. The two parties established the new laboratory on March 1, 2023 as part of Fujitsu's "Fujitsu Small Research Lab" (1) program and Ochanomizu University's Social Collaboration Program (2), one of the University's industry-academia collaboration programs.

Ochanomizu University in April 2022 established the Institute for Gendered Innovations (3) to promote research, innovation, and social communication based on gender perspectives, strengthening its track record in research on gender equality issues. Based on its expertise in trustworthy and ethical AI, Fujitsu developed technology to mitigate intersectional bias (4) to prevent AI from discriminating against different groups due to bias in learning data.

Within the new joint research program, the two parties will combine Fujitsu's AI ethics technology and Ochanomizu University's knowledge in gendered innovations to conduct pioneering R&D in AI solutions that enable quantitative and objective gender equality measures, and promote the development of talent able to contribute to the solution of societal issues through interdisciplinary expertise.

Background

Gender equality, which also represents one of the United Nations' Sustainable Development Goals (SDGs) remains an important issue worldwide. In the Global Gender Gap Report 2022, Japan was ranked 116th out of 146 countries worldwide (5), revealing significant gender inequality persists in the country. To address this issue, the Japanese Cabinet Office implemented measures including "The Fifth Basic Plan for Gender Equality" (6) as a basic act for realizing a gender equal society. However, social implementation of measures to achieve gender equality continues to be an ongoing challenge, as concerns – both in Japan and other countries worldwide – remain, that efforts to empower women might on the other hand create new, unintentional unfairness toward other parties.

To address these issues, Fujitsu and Ochanomizu University established the "Fujitsu-Ochanomizu University Social Collaboration Program for AI Ethics" to explore the possibility of utilizing AI solutions to contribute to the solution of gender inequalities. However, as AI itself can cause risks including the discrimination of minority groups due to bias in the AI training data, social trustworthiness represents a central focus in the development of AI systems. To this end, Fujitsu and Ochanomizu University aim to develop practical solutions to gender issues, while addressing the risk of bias in AI by leveraging Fujitsu's strength in R&D in ethical AI technologies and Ochanomizu University's research on gendered innovations. In addition to their R&D activities, the two parties further plan to nurture talent able to take the lead in solving societal issues by combining

approaches from information science and social sciences.

Outline of the “Fujitsu-Ochanomizu University Social Collaboration Program for AI Ethics”

1. **Period:**

March 1, 2023 – March 31, 2026

2. **Location of the collaborative research laboratory:**

Institute for Gendered Innovations, Ochanomizu University (Bunkyo-ku, Tokyo, Japan)



Image 1: Ochanomizu University Institute for Gendered Innovations

3. **Outline of the joint research**

As a first step of the joint project, Fujitsu and Ochanomizu University aim to develop an AI solution for highly reliable human resource assessment by the end of March 2024 to contribute to the realization of a diverse, equal and inclusive society. To approach ethical risks in AI models, the two parties will apply Fujitsu’s technology to mitigate intersectional bias to human resource assessment AI technology and verify the fairness of the assessment results using evaluation methods including interviews and workshops, utilizing Ochanomizu University’s expertise in the social sciences. Within the verification tests, the two parties will use AI technology to conduct quantitative analysis of the fairness of the assessments and present the decision-making process and facts behind the analysis results to ensure that the AI eliminates any unequal treatment of women, but at the same time does not create any new unfairness affecting the total majority. Based on the results of the tests, the two parties will further improve this human resource assessment AI to ultimately develop a technology that ensures fair and nondiscriminatory decisions.

Utilizing the results of this joint research, Fujitsu and Ochanomizu University will propose concrete solutions that contribute to the solution of gender inequality and societal issues.

The two partners further plan to hold seminars and workshops on various themes related to AI technologies and societal issues to nurture future specialists and leaders able to address societal issues through cross-sectional collaborations.

4. Roles and responsibilities

Fujitsu:

- Research and development of AI ethics technologies, application to gender equality issues
- Development of technological solutions

Ochanomizu University:

- Evaluation of the AI's judgment and assessment with regard to social fairness
- Development of practical solutions to solve societal issues, policy proposals

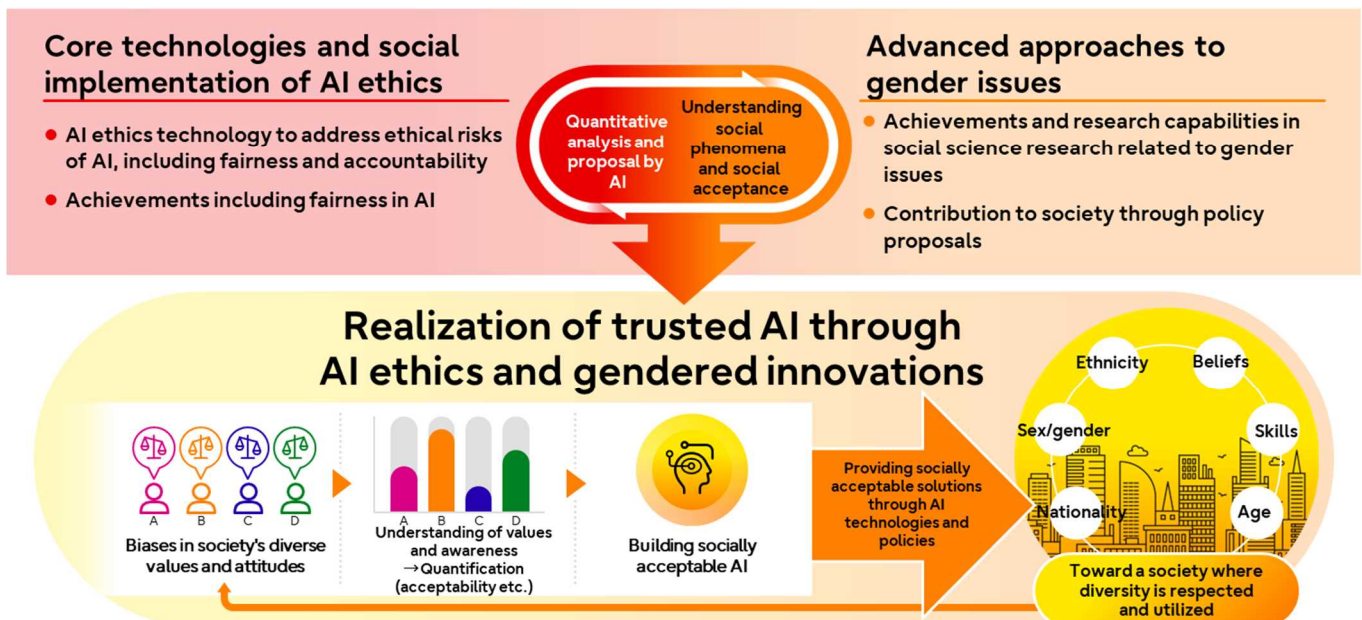


Image 2: Overview of the initiatives of the Fujitsu-Ochanomizu University Social Collaboration Program for AI Ethics

5. Organization:

- Program Leader: Etsuko Saito (Professor, Institute for Gendered Innovations, Ochanomizu University)
- Program Sub-leader: Hiroya Inakoshi (Project Director, Human-AI Collaborative Society Project, Research Center for AI Ethics, Research Unit, Fujitsu)
- Izumi Nitta (Research Scientist, Human-AI Collaborative Society Project, Research Center for AI Ethics, Research Unit, Fujitsu)
- Mika Omori (Professor, Human Science Division, Faculty of Core Research, Ochanomizu University)
- Takayuki Ito (Professor, Natural Science Division, Faculty of Core Research, Ochanomizu University)
- 17 additional researchers from both Fujitsu and Ochanomizu University

Notes:

1. Fujitsu Small Research Lab:

Initiative where Fujitsu researchers are embedded at technology incubators at universities in Japan and internationally to conduct joint research with some of the leading minds in their fields, including professors as well as the next generation of researchers.

2. Ochanomizu University's Social Collaboration Program:

The Social Collaboration Program accepts funds and researchers from research institutes and private companies to carry out collaborative research and education projects with shared interests.

3. Gendered innovations:

Gendered innovations research and technology development considers gender perspectives to find solutions that help create new innovations and ultimately contribute to the realization of gender equality.

(For reference: Institute for Gendered Innovation (IGI) : <https://www.cf.ocha.ac.jp/igi-en/index.html>)

4. Technology to mitigate intersectional bias:

Technology developed by Fujitsu that mitigates intersectional bias that appear when attributes such as age, gender, and nationality are combined under certain conditions.

5. Japan was ranked 116th out of 146 countries worldwide:

Source: World Economic Forum "Global Gender Gap Report 2022" (<https://www.weforum.org/reports/global-gender-gap-report-2022/>)

6. The Fifth Basic Plan for Gender Equality

Whitepaper Japanese Cabinet Office:

https://www.gender.go.jp/english_contents/about_danjo/whitepaper/pdf/5th_bpg.pdf

Related links:

"Fujitsu develops AI development method that takes into account the fairness of different cultures and business practices from the design stage" (press release, March 31, 2021: <https://pr.fujitsu.com/jp/news/2021/03/31-1.html>) (in Japanese)

About Fujitsu

Fujitsu's purpose is to make the world more sustainable by building trust in society through innovation. As the digital transformation partner of choice for customers in over 100 countries, our 124,000 employees work to resolve some of the greatest challenges facing humanity. Our range of services and solutions draw on five key technologies: Computing, Networks, AI, Data & Security, and Converging Technologies, which we bring together to deliver sustainability transformation. Fujitsu Limited (TSE:6702) reported consolidated revenues of 3.6 trillion yen (US\$32 billion) for the fiscal year ended March 31, 2022 and remains the top digital services company in Japan by market share. Find out more: www.fujitsu.com/

About Ochanomizu University

Ochanomizu University was established in 1875 as Japan's first national institution of higher education for women, and now enjoys a history of over 145 years. As a pioneer of women's education in Japan, Ochanomizu University offers programs that will develop women capable of being leaders in politics, economics, academia, culture, and other fields on the international stage.

Press Contacts

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