

Yuri Ishitoya

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EDUCATION

Ochanomizu University*M.S. in Information Science* (Advisor: Prof. Ichiro Kobayashi)

Tokyo, JPN

Apr 2025 – Present

- GPA: 4.0/4.0

Ochanomizu University*B.S. in Information Science* (Advisor: Prof. Ichiro Kobayashi)

Tokyo, JPN

Apr 2021 – Mar 2025

- GPA: 3.8/4.0

RESEARCH EXPERIENCE

OMRON SINIC X Corporation*Research Intern* (Advisor: Dr. Mai Nishimura)

Tokyo, JPN

Jan 2026 – Present

- Maintaining Generalization Performance During VLA Post-Training.

Ochanomizu University*M.S. Researcher, Computer Science* (Advisor: Prof. Ichiro Kobayashi)

Tokyo, JPN

Apr 2025 – Present

- Developed embedding-level bias mitigation techniques by mapping concept vectors from hidden states to output embeddings and manipulating dimensions that control token probability distributions [2].

vislang at Rice University*Visiting Student* (Advisor: Prof. Vicente Ordóñez Román)

Texas, USA

Feb 2025 – Aug 2025

- Created a benchmark to evaluate how VLM scale influences associative reasoning and bias.
- Led a comprehensive evaluation of 39 vision-language models across classification, bias assessment, and identity verification tasks [1].

Artificial Intelligence Research Center at Fujitsu Laboratories Ltd.*Short-term Research Intern* (Advisor: Dr. Hiroya Inakoshi)

Tokyo, JPN

Aug 2024

- Designed prompt-based personality conditioning techniques and evaluation metrics to control and measure persona attributes in LLM-generated training data for bias detection, as part of a fair AI recruitment interview system [3, 4].
- Presented findings at the Fujitsu Small Research Lab National Conference 2024 (Tokyo, JPN).

Ochanomizu University*B.S. Researcher, Computer Science* (Advisor: Prof. Ichiro Kobayashi)

Tokyo, JPN

Apr 2024 – Mar 2025

- Developed a frequency-based bias detection method by applying Discrete Fourier Transform (DFT) to log-likelihood sequences, isolating stable low-frequency components that capture subtle gender bias beyond probability-gap analyses [5].

Ochanomizu University*Pre-Graduation Undergraduate Research Project* (Advisor: Prof. Takayuki Itoh)

Tokyo, JPN

Apr 2023 – Mar 2024

- Analyzed gender gap factors across 47 prefectures in Japan by collecting and screening over 300 regional datasets to identify correlations and latent structures underlying disparities[6].

PUBLICATIONS

Refereed / Under Review

1. **Ishitoya, Yuri**, Flores, V., Yang, Z., Cascante-Bonilla, P. & Ordonez, V. *Evaluating Vision-Language Models through a Human-Centered Benchmark* Under revision for resubmission to ACL Rolling Review. 2025.

Non-refereed

2. **Ishitoya, Yuri** & Kobayashi, I. *Mitigating Statistical and Causal Bias Through Output Embedding Operations* in *Proceedings of the 32th Annual Conference of the Natural Language Processing (NLP2026)* Non-refereed, in Japanese (2026).

3. Ishida, K., **Ishitoya, Yuri**, Kobayashi, I. & Igarashi, Y. *A Study on the Usefulness of an Interviewer Support System that Points Out Gender-Based Judgments* in *Proceedings of the 212th Human-Computer Interaction Study Group (IPSI SIG-HCI)* Non-refereed, in Japanese (2025).
4. Ishida, K., **Ishitoya, Yuri**, Kobayashi, I. & Igarashi, Y. *Proposal and Development of an AI Interviewer Support System that Points Out Gender-Based Judgments* in *Proceedings of the 39th Annual Conference of the Japanese Society for Artificial Intelligence (JSAI2025)* Non-refereed, in Japanese (2025).
5. **Ishitoya, Yuri** & Kobayashi, I. *A Study on Detecting Subtle Biases by Expanding the Log-Likelihood into a Frequency Space* in *Proceedings of the 39th Annual Conference of the Japanese Society for Artificial Intelligence (JSAI2025)* Non-refereed, in Japanese (2025).
6. **Ishitoya, Yuri** & Ito, T. *Analysis of the Causes of the Gender Gap through Data Comparison and Visualization by the 47 Prefectures* in *Proceedings of the 38th Annual Conference of the Japanese Society for Artificial Intelligence (JSAI2024)* Non-refereed, in Japanese (2024).

FELLOWSHIP & GRANTS

Tobitate! Study Abroad Scholarship , Japan Ministry of Education (JPY 670k grant, 22% acceptance rate)	2025
MITOU IT Program , IPA (JPY 2.74M grant, 13% acceptance rate)	2023
Women Leaders Support Fund , Public Resource Foundation (JPY 1.0M grant, 6.8% acceptance rate)	2023

HONORS & AWARDS

Oin-kai Research Encouragement Award , Ochanomizu University	2025
Pre-Graduation Research Excellence Award , Ochanomizu University	2024
Finalist Award / Innovator Certification / Yamareco Inc. Award , JPHACKS	2023
Best Teamwork Award , Google Hardware Hackathon	2023
First Runner-up , Giiku CAMP vol.8 Hackathon	2023
Finalist Award / Innovator Certification / Nokia Solutions & Architecture Award / Special Recognition , JPHACKS	2022

INDUSTRY EXPERIENCE

Yamada Shintaro D&I Foundation (Public Interest Incorporated Foundation) <i>Software Engineer</i>	Tokyo, JPN Nov 2024 – Present
<ul style="list-style-type: none"> • Designed and developed an application and screening platform for a STEM scholarship program for female high school students. 	
Dots to Code Association <i>Founder & Representative Director</i>	Tokyo, JPN Jun 2024 – Apr 2025
<ul style="list-style-type: none"> • Organized Japan's largest hackathon for women and non-binary individuals. 	
NPO, Waffle.org <i>Intern</i>	Tokyo, JPN Apr 2022 – Nov 2023
<ul style="list-style-type: none"> • Delivered programming curricula to 500+ female students and conducted data analysis for annual report. 	

SERVICE

Teaching

- Teaching Assistant, Ochanomizu University: Introduction to Natural Language Theory

Diversity, Equity, & Inclusion (DEI) Leadership

- Co-founder, Blend Gendered Innovation Initiative (2023-Current)
- Co-founder, OchaHack (2023)

SKILLS

- **Programming Languages:** Python, JavaScript (Vue.js, React, Node.js), C, Java, OCaml, R, Dart (Flutter), CUDA
- **AI/ML & NLP:** PyTorch, Hugging Face Transformers, scikit-learn, NLTK, SpaCy, NNSight
- **Tools & Platforms:** Firebase, MongoDB, Postman, Docker, Git, LaTeX