

Yuri Ishitoya

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EDUCATION

Ochanomizu University <i>M.S. in Information Science</i> (Advisor: Prof. Ichiro Kobayashi)	Tokyo, JPN Apr 2025 – Present
• GPA: 4.0/4.0	
Ochanomizu University <i>B.S. in Information Science</i> (Advisor: Prof. Ichiro Kobayashi)	Tokyo, JPN Apr 2021 – Mar 2025
• GPA: 3.8/4.0	

RESEARCH EXPERIENCE

OMRON SINIC X Corporation <i>Full Time Research Intern</i> (Advisor: Dr. Mai Nishimura)	Tokyo, JPN Incoming (Jan 2026)
• Knowledge distillation for LLMs and VLMs (representation-level analysis).	
Ochanomizu University <i>M.S. Researcher, Computer Science</i> (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.	
vislang at Rice University <i>Visiting Student</i> (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. <i>Short-term Research Intern</i> (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 [2, 3].	
• Presented findings at the Fujitsu Small Research Lab National Conference 2024 (Tokyo, JPN).	
Ochanomizu University <i>B.S. Researcher, Computer Science</i> (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 [4].	
Ochanomizu University <i>Pre-Graduation Undergraduate Research Project</i> (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[5].	

PUBLICATIONS

Refereed / Under Review

- 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

- 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 (IPSJ SIG-HCI) Non-refereed, in Japanese (2025).

3. 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 (JSAl2025)* Non-refereed, in Japanese (2025).
4. **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 (JSAl2025)* Non-refereed, in Japanese (2025).
5. **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 (JSAl2024)* 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)	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)	Tokyo, JPN
<i>Software Engineer</i>	Nov 2024 – Present
• Designed and developed an application and screening platform for a STEM scholarship program for female high school students.	
Dots to Code Association	Tokyo, JPN
<i>Founder & Representative Director</i>	Jun 2024 – Apr 2025
• Organized Japan's largest hackathon for women and non-binary individuals.	
NPO, Waffle.org	Tokyo, JPN
<i>Intern</i>	Apr 2022 – Nov 2023
• 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