

Etsuko Ishii

<https://www.linkedin.com/in/etsuko-ishii77/>

EXPERIENCE

Amazon Web Services

Applied Scientist

New York, NY, U.S.A.

August 2024 – Present

Amazon Web Services

Applied Scientist Intern

New York, NY, U.S.A.

September 2022 – December 2022 and June 2023 – October 2023

Kyoto University

Visiting Researcher, Host Lab: Prof. Tatsuya Kawahara, School of Informatics

Kyoto, Japan

January 2021

Implemented and evaluated the dialogue system which is specialized for the people under self-quarantine on humanoid ERICA.

IBM Research

Research Intern

Tokyo, Japan

May 2018 – September 2018 and April 2019 – July 2019

Developed a system to measure similarities between text and images to insert images into articles at a specific location.

The Hong Kong University of Science and Technology

Research Intern, Advisor: Prof. Pascale Fung, Department of Electrical and Computer Engineering

Hong Kong

January – March 2018

Conducted research on the emotional classification of paintings based on their texture and contents by semi-supervised learning.

Rice University

Undergraduate Research Intern, Advisor: Prof. Devika Subramanian, Department of Computer Science

Houston, TX, U.S.A.

Summer 2017

Analyzed Houston flooding using unsupervised machine learning with LIDAR data.

EDUCATION

The Hong Kong University of Science and Technology

Ph.D. in Electronic and Computer Engineering

Hong Kong

September 2019 – July 2024

Supervisor: Prof. Pascale Fung, Thesis: “Understanding Context in Conversational AI.”

Graduate Student Representative of Committee on Student Affairs of the Senate 2021-2022.

The University of Tokyo

Bachelor of Engineering in Applied Mathematics in the Department of Mathematical Engineering

Tokyo, Japan

April 2015 – July 2019

Supervisor: Prof. Kazuyuki Aihara, Thesis: “Mathematical Analysis on Echo State Networks for Time Series Prediction.”

Member of the Freshmen Orientation Committee, and member of the 66th Komaba Campus Festival Committee.

SELECTED PUBLICATIONS – (FULL LIST AVAILABLE IN MY GOOGLE SCHOLAR)

[EMNLP2024]: Bryan Wilie, Samuel Cahyawijaya, Etsuko Ishii, Junxian He, Pascale Fung. Belief Revision: The Adaptability of Large Language Models Reasoning. Accepted at EMNLP 2024.

[EMNLP2023]: [Etsuko Ishii](#), Yan Xu, Bryan Wilie, Ziwei Ji, Holy Lovenia, Willy Chung, Pascale Fung. Contrastive Learning for Inference in Dialogue. Accepted at EMNLP 2023.

[EMNLP2023-Findings]: Ziwei Ji, Tiezheng Yu, Yan Xu, Nayeon Lee, [Etsuko Ishii](#), Pascale Fung. Towards Mitigating Hallucination in Large Language Models via Self Reflection. Accepted at EMNLP 2023 Findings.

[ACM Computing Survey]: Ziwei Ji, Nayeon Lee, Rita Frieske, Tiezheng Yu, Dan Su, Yan Xu, [Etsuko Ishii](#), Yejin Bang, Andrea Madotto, Pascale Fung. Survey of Hallucination in Natural Language Generation. Accepted to ACM Computing Surveys, Volume 55, Issue 12 (2023 March).

[ACL2022-Insights]: [Etsuko Ishii*](#), Yan Xu*, Samuel Cahyawijaya*, Bryan Wilie. Can Question Rewriting Help Conversational Question Answering? Accepted at Workshop on Insights from Negative Results in NLP.

[ACL2022-SRW]: [Etsuko Ishii*](#), Bryan Wilie*, Yan Xu*, Samuel Cahyawijaya*, Pascale Fung. Integrating Question Rewrites in Conversational Question Answering: A Reinforcement Learning Approach. Accepted at Student Research Workshop.

[ACL2022-DialDoc]: Yan Xu*, [Etsuko Ishii*](#), Zihan Liu, Genta Indra Winata, Dan Su, Andrea Madotto, Pascale Fung. Retrieval-Free Knowledge-Grounded Dialogue Response Generation with Adapters. Accepted at DialDoc-22 Workshop & Best Student Paper Award.

[ACL2021-DialDoc]: [Etsuko Ishii*](#), Yan Xu*, Genta Indra Winata, Zhaojiang Lin, Andrea Madotto, Zihan Liu, Peng Xu, Pascale Fung. CAiRE in DialDoc21: Data Augmentation for Information-Seeking Dialogue System. Accepted at DialDoc-21 Workshop.

[SIGDIAL2021-Demo]: [Etsuko Ishii](#), Genta Indra Winata, Samuel Cahyawijaya, Lala Divesh, Tatsuya Kawahara, Pascale Fung. ERICA: An Empathetic Android Companion for COVID-19 Quarantine. Accepted at SIGDIAL 2021 Demo.

[AAAI2021-CONSTRAINT]: Yejin Bang*, Etsuko Ishii*, Samuel Cahyawijaya*, Ziwei Ji*, Pascale Fung. Model Generalization on COVID-19 Fake News Detection. Accepted at CONSTRAINT-2021 Workshop.

[EMNLP2020-Findings]: Andrea Madotto*, Etsuko Ishii*, Zhaojiang Lin*, Sumanth Dathathri*, Pascale Fung. Plug-and-Play Conversational Models. Accepted at EMNLP 2020 Findings.

[LREC2020]: Masayasu Muraoka, Ryosuke Kohita, Etsuko Ishii. Image Position Prediction in Multimodal Documents. Accepted at LREC 2020.

SCHOLARSHIPS

Hong Kong PhD Fellowship, The Research Grants Council of Hong Kong: Total of \approx \$40,200 USD (HKD 313,800) per year for top 250 full-time PhD students in Hong Kong: September 2019 – August 2023.

International Visiting Internship Student Program Sponsorship, The Hong Kong University of Science and Technology: Total of \approx \$2,600 USD for selected international interns: February – March 2018 (HKD2,000).

Nakatani RIES: Research and International Experiences for Japanese Students Fellowship, Nakatani Foundation: Total of \approx \$10,000 USD for research internship at Rice University: Summer 2017.

Go Global Scholarship Program, The University of Tokyo Foundation: Total of \approx \$7,000 USD for study abroad: February – March 2018 (JPY140,000), August 2016 (JPY500,000), and January 2016 (JPY80,000)

ACTIVITIES

DialDoc-21 Competition in ACL-2021: Winning 3rd place in Subtask 2 in the first DialDoc Workshop’s Shared Task which focuses on building goal-oriented information-seeking dialogue systems.

Voluntary Work: Served as an EMNLP-IJCNLP 2019, EMNLP 2021, and ACL 2022 Student Volunteer.

Reviewer: Served as a reviewer of ACL2023, EMNLP2023, ACL2024, EMNLP 2024, NAACL 2025, and workshops (NeurIPS2022-ENLSP, ACL2022-RepL4NLP, ACL2023-RepL4NLP, and ACL2023-DialDoc).

Teaching Assistant: ELEC4240 Deep Learning in Computer Vision (Prof. Qifeng Chen) in Spring 2020 and Fall 2020. Delivered three lectures per semester and graded assignments and exams of over 80 undergraduate students per semester.

German-English Translator: Supported German-English translation of discrete mathematics literature; Contributed in Satoru Iwata & Yu Yokoi. A Blossom Algorithm for Maximum Edge-Disjoint T-Paths. Accepted at Proceedings of the 2020 ACM-SIAM Symposium on Discrete Algorithms, and Satoru Iwata & Yu Yokoi. Combinatorial Algorithms for Edge-Disjoint T-Paths and Integer Free Multiflow. arXiv:1909.07919.

Section Head of the 91st May Festival Committee (2018): Organized talks and exhibitions on machine learning of Dept. of Mathematical Engineering, the University of Tokyo, for annual university exhibition open to the public which welcomes 160,000 guests in two days.

SKILLS

Languages: Japanese (Native Speaker), English (Fluent), German (Intermediate), Chinese (Elementary)

Programming: Python, Machine Learning Tools (PyTorch, TensorFlow, etc.), \LaTeX