Eri Kuroda

Department of Information Sciences in Science

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ORCiD

Google Scholar

Education

Oct. 2023– Mar 2024	**Guest Researcher** Ubiquitous Media Technology Lab, Saarland University, Saarbücken, Germany Host researcher: Prof. Dr. Antonio Krüger
Oct. 2022 – Dec 2022	**Internship Student** German Research Center for Artificial Intelligence (DFKI), Saarbücken, Germany Host researcher: Dr.-Ing. Boris Brandherm
Apr. 2022 – Present	**JSPS Research Fellow (DC1)** Japan Society for the Promotion of Science, Tokyo, Japan
Apr. 2022 – Present	**Ph.D. student (Computer Science)** Ochanomizu University, Tokyo, Japan Supervisor: Prof. Ichiro Kobayashi
Apr. 2020 – Mar 2022	**M.Sc.** Ochanomizu University, Tokyo, Japan Supervisor: Prof. Ichiro Kobayashi Major GPA: 4.0/4.0
Apr. 2016 – Mar 2020	**B.Sc** Ochanomizu University, Tokyo, Japan Supervisor: Prof. Ichiro Kobayashi Major GPA: 3.35/4.0

Talks & Publications

Journal

International Conference

1. **Kuroda,E.**, Kobayashi, I. Predictive Inference Model of the Physical Environment that emulates Predictive Coding. 26th International Conference on Discovery Science. Long Paper, Oral, Porto, Portugal, Oct 9th-11th, 2023 (Acceptance rate 35.3%). 10.1007/978-3-031-45275-8_29
2. **Kuroda,E.**, Kobayashi, I. Extraction of motion change points based on the physical characteristics of objects. 2023 IEEE the 4th international conference on pattern recognition and machine learning. Long Paper, Oral, Xinjiang University, China, Aug 4th-6th, 2023. 10.1109/PRML59573.2023.10348369

3. **Kuroda,E.**, Nishimoto, S., Nishida, S., Kobayashi, I. A Deep Generative Model imitating Predictive Coding in the Human Brain. The 22nd International Symposium on Advances Intelligent Systems, Oral, Long Paper, Online, Dec 15th-18th, 2021.

Domestic Conference (in Japanese)

1. **Kuroda,E.**, Kobayashi, I. Verbal Description Focusing on Physical Properties of Real-world Environments. The 38th Annual Conference of the Japanese Society for Artificial Intelligence, Oral, ACT CITY Hamamatsu, Shizuoka, May 28th-31st, 2024.
2. **Kuroda,E.**, Kobayashi, I. Predictive Inference Model of the Physical Environment that mimics Predictive Coding. The 37th Annual Conference of the Japanese Society for Artificial Intelligence, Oral, Kumamoto-jo Hall, Kumamoto, Jun 5th-9th, 2023. 10.11517/pjsai.JSAI2023.0_1G4OS21a05
3. **Kuroda,E.**, Kobayashi, I. A Study on the Construction of an Inflection Point Prediction Model Imitating Predictive Coding in the Human Brain Under Physical Environments. The 85th National Convention of IPSJ, Oral, The University of Electro-Communications, Tokyo, Mar 2nd-4th, 2023. id.nii.ac.jp/1001/00229739/
4. **Kuroda,E.**, Kobayashi, I. A Study on Extraction of Motion Inflection Points Focusing on Objects in an Image. The 36th Annual Conference of the Japanese Society for Artificial Intelligence, Oral, Kyoto International Conference Center, Kyoto, Jun 14th-17th, 2022. 10.11517/pjsai.JSAI2022.0_2M1OS19a02
5. **Kuroda,E.**, Kobayashi, I. A Study on Extracting the Inflection Point in the Physical Environment. The 84th National Convention of IPSJ, Oral, Online, Mar 3rd-5th, 2022. id.nii.ac.jp/1001/00221065/
6. **Kuroda,E.**, Nishimoto, S., Nishida, S., Kobayashi, I. A Study on a Deep Generative Model Imitating Predictive Coding. The 83rd National Convention of IPSJ, Oral, Online, Mar 18th-20th, 2021. id.nii.ac.jp/1001/00214918/
7. **Kuroda,E.**, Nishimoto, S., Nishida, S., Kobayashi, I. A Deep Generative Model Imitating Predictive Coding. The 23rd Information-Based Induction Sciences Workshop, Oral, Online, Nov 23rd-26th, 2020.
8. **Kuroda,E.**, Kobayashi, I. A Study on Building a Deep Generative Model for Prediction in the Human Brain. The 34th Annual Conference of the Japanese Society for Artificial Intelligence, Oral, Online, Jun 8th-11th, 2020. 10.11517/pjsai.JSAI2020.0_1O3GS801
9. **Kuroda,E.**, Kobayashi, I. A Study on Predicting the Real World using Deep Generative Models. The 82nd National Convention of IPSJ, Oral, Online, Mar 5th-7th, 2020. id.nii.ac.jp/1001/00205169/
10. **Kuroda,E.**, Kobayashi, I. A Study on Building a Deep Generative Model for Prediction in the Human Brain. Chronogenesis, Poster, Toyonaka, Osaka, Feb 1st-2nd, 2020.

Invited Talks

1. Research Introduction, Saarland University, Prof.Dr. Vera Demberg team, Oct 30th, 2023.
2. Plenary Talk, National Institute of Advanced Industrial Science and Technology (AIST), Artificial Intelligence Research Center (AIRC), May 30th, 2023.
3. Education Program for Female Leaders : Training Course, Ochanomizu University, Institute for Global Leadership, Jan 24th, 2023.
4. Research Introduction, DFKI Cognitive Assistants, Dr.-Ing. Jan Alexandersson team, Nov 30th, 2022.
5. Research Introduction, DFKI Cognitive Assistants, Dr.-Ing. Boris Brandherm team, Oct 25th, 2022.
6. Online seminars for female students, RIKEN Center for Advanced Intelligence Project (AIP), Oct 20th, 2022. YouTube Report

Others

1. **Kuroda, E.** Special Issue: New Trends of Researches for Doctoral Theses. Journal of the Japanese Society for Artificial Intelligence, Vol.39, No.1, pp.46-47. 10.11517/jjsai.39.1_46
2. **Kuroda, E.** Student Forum (117) Interview with Associate Prof. Yuki Igarashi: Real Opinions and Communications. Journal of the Japanese Society for Artificial Intelligence, Vol.38, No.3, pp.429-434. 10.11517/jjsai.38.3_429
3. **Kuroda, E.** Project on Student Editorial Committee: Report on the 40th Annual Conference of the Robotics Society of Japan (Probabilistic Robotics and Data Engineering Robotics ~Recognition, Behavioral Learning, and Symbolic Emergence~(4/4)). Journal of the Robotics Society of Japan, Vol.41, No.2, pp.149-150. 10.7210/jrsj.41.149
4. **Kuroda, E.** Project on Student Editorial Committee: Report on the 40th Annual Conference of the Robotics Society of Japan (Probabilistic Robotics and Data Engineering Robotics ~Recognition, Behavioral Learning, and Symbolic Emergence~(3/4)) Journal of the Robotics Society of Japan, Vol.41, No.1, pp.46-47. 10.7210/jrsj.41.46
5. **Kuroda, E.** Project on Student Editorial Committee: Report on the 40th Annual Conference of the Robotics Society of Japan (Probabilistic Robotics and Data Engineering Robotics ~Recognition, Behavioral Learning, and Symbolic Emergence~(1/4)) Journal of the Robotics Society of Japan, Vol.41, No.1, pp.44-45. 10.7210/jrsj.41.44
6. **Kuroda, E.**, Ohkuma, T., Takano, M., Morita, C., Sakurai, Y., Kiyota, Y. The World Students See Through Research Journal of the Japanese Society for Artificial Intelligence, Vol.37, No.5, pp.640-648. 10.7210/jrsj.41.44
7. **Kuroda, E.**, Kashiwakura, S., Matsui, A. Student Forum (112) Interview with Prof. Akiko Aizawa: Climb Your Own Mountain, Even If Its Small at First. Journal of the Japanese Society for Artificial Intelligence, Vol.37, No.4, pp.533-536. 10.11517/jjsai.37.4_533
8. **Kuroda, E.**, Sakurai, Y., Takano, M., Sakuma, H., Kiyota, Y. AI System Papers -Challenges and Possibilities for Collaboration among Different Communities- Journal of the Japanese Society for Artificial Intelligence, Vol.37, No.3, pp.323-328. 10.11517/jjsai.37.3_323
9. **Kuroda, E.**, Yamakawa, H., Toriumi, F., Sakuma, H., Kiyota, Y. Concept Papers -To Facilitate Dissemination of High-Impact Papers- Journal of the Japanese Society for Artificial Intelligence, Vol.37, No.3, pp.329-333. 10.11517/jjsai.37.3_329
10. Onishi, M., **Kuroda, E.**, Sakuma, H. Student Forum (110) Interview with Prof. Emi Tamaki: The Future of "Body Sharing Technology" Based on Deep Sensation Journal of the Japanese Society for Artificial Intelligence, Vol.37, No.2, pp.237-239. 10.11517/jjsai.37.2_237

Funds

Apr. 2024 – Mar. 2025 **Research Grant (C) (JPY 500,000)**
Tateisi Science and Technology Foundation
"Counter-intuitive Motion Prediction and Language Generation in the Real World"

Nov. 2023 **Yasui-Kuroda Scholarship (JPY 30,000)**
Ochanomizu University

Oct. 2023 – Mar. 2024 **Overseas Challenge Program for Young Researchers (JPY 1,400,000)**
Japan Society for the Promotion of Science
"Predictive Sentences based on Knowledge and Experience of Physical Laws" (202380089)
Host Researcher: Prof. Dr. Antonio Krüger
Host Institute: Ubiquitous Media Technology Lab, Saarland University

Nov. 2023 **Grant-in-Aid for JSPS Research Fellows (DC1) (JPY 2,500,000)**
Japan Society for the Promotion of Science
"Real-world Language Explanations based on Human Predictive Functions that Capture the Physical Environment" (JP22J21786)
Supervisor: Prof. Ichiro Kobayashi, Ochanomizu University

Mar. 2021 **Research Grant (JPY 500,000)**
Leave a Nest Co. and Appliances Company, Panasonic Co.

Apr. 2020 – Mar. 2022 **Scholarship (JPY 500,000)**
Ochanomizu University and Inc. KSP-SP.

Apr. 2020 – Mar. 2022 **JASSO Scholarship for Category 1 (JPY 2,112,000)**
Japan Student Services Organization

Nov. 2019 **Research Grant (JPY 200,000)**
Ochanomizu University AI-Data Science Center

Awards

Apr. 2022 **Repayment Exemption of JASSO Scholarship (Category 1)**
Japan Student Services Organization

Mar. 2022 **Student Encouragement Award of IPSJ National Convention**
The 84th National Convention of IPSJ

Feb. 2022 **Best Session Award**
The 22nd International Symposium on Advanced Intelligent Systems

Dec. 2020 **FY2020 Student Award**
Ochanomizu University

May. 2020 **Best Paper Award of IPSJ National Convention**
The 82nd National Convention of IPSJ

Mar. 2020 **Student Encouragement Award of IPSJ National Convention**
The 82nd National Convention of IPSJ

Experiences

Oct. 2023 – Mar. 2024 **Guest Researcher**
Ubiquitous Media Technology Lab, Saarland University, Saarbücken, Germany
Host researcher: Prof. Dr. Antonio Krüger

Nov. 2022 – Present **Industry Collaboration Committee Member**
Japan Society for the Promotion of Science

Nov. 2022 – Dec. 2022 **Teaching Assistant for Japanese Language Education**
Saarland University

Oct. 2022 – Dec. 2022 **Internship Student**
German Research Center for Artificial Intelligence (DFKI)
Host researcher: Dr.-Ing. Boris Brandherm

Apr. 2022 – Present **JSPS Research Fellow (DC1)**
Japan Society for the Promotion of Science

Apr. 2022 – Present	**JSPS Research Fellow (DC1)** Japan Society for the Promotion of Science
Jun. 2021 – Present	**Student Editor** The Japanese Society for Artificial Intelligence
Apr. 2021 – Mar. 2022	**FY2021 IPSJ Journal Monitor** The Information Processing Society of Japan
Apr. 2021 – Aug. 2021	**Teaching Assistant (Introduction to Data Analysis)** Ochanomizu University
Apr. 2021 – Aug. 2021	**Teaching Assistant (Exercises in Information Processing)** Ochanomizu University
Oct. 2020 – Mar. 2021	**Teaching Assistant (Information Lecture2)** Ochanomizu University
Apr. 2020 – Mar. 2022	**Teaching Assistant (University Library)** Ochanomizu University
Aug. 2017 – Sep. 2017	**Short-term Study Abroad** The University of Manchester

Skills

Languages: Japanese (Native), English (TOEIC810)

Programming: Python, C, R, Java, HTML/CSS

Other Skills: Microsoft Office Specialist (certified as Expert)