

## RESEARCH INTERESTS

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Robot Learning, Representation Learning, Computer Vision

## EDUCATION

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**University of Oxford** · Oxford, United Kingdom **10/2021 ~ Present**

- DPhil Engineering Science
- The Applied AI Lab (A2I), Supervisor: Professor Ingmar Posner

**University of Southern California** · Los Angeles, United States **10/2019 ~ 10/2021**

- Visiting scholar at Cognitive Learning for Vision and Robotics (CLVR) lab, Supervisor: Professor Joseph J. Lim

**University College London** · London, United Kingdom **09/2018 ~ 09/2019**

- MSc Data Science and Machine Learning in the Department of Computer Science
- Distinction Honor

**Keio University** · Tokyo, Japan **04/2014 – 03/2018**

- B.Eng. in Administration Engineering (computer science, applied mathematics, and statistics)

**KTH Royal Institute of Technology** · Stockholm, Sweden **08/2016 – 07/2017**

- Exchange student, School of Computer Science

## PUBLICATIONS

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- M Rigter, **J Yamada**, I Posner, “World Models via Policy-Guided Trajectory Diffusion”, *under review*
- **J Yamada**, M Rigter, J Collins, I Posner, “TWIST: Teacher-Student World Model Distillation for Sim-to-Real Transfer”, *under review at ICRA 2024*
- **J Yamada**, J Collins, I Posner, “Efficient Skill Acquisition for Industrial Insertion Tasks in Obstructed Environments”, *under review*
- M Kobayashi\*, **J Yamada\***, M Hamaya, K Tanaka, “LfDT: Learning Dual-Arm Manipulation from Demonstration Translated from Human and Robotic Arm”, *IEEE-RAS International Conference on Humanoid Robotics*, 2023
- J Collins\*, M Robson\*, **J Yamada\***, M Sridharan, K Janik, I Posner, “RAMP: A Benchmark for Evaluating Robotic Assembly Manipulation and Planning”, *Robotics and Automation Letters (RA-L)*, 2023
- AL Mitchell, OP Jones, **J Yamada**, W Merkt, I Havoutis, I Posner, “From Primates to Robots: Emerging Oscillatory Latent-Space Dynamics for Sensorimotor Control”, *Conference on Cognitive Computational Neuroscience (CNN)*, 2023
- **J Yamada\***, C Hung\*, J Collins, I Havoutis, I Posner, “Leveraging Scene Embeddings for Gradient-Based Motion Planning in Latent Space”, *International Conference on Robotics and Automation (ICRA)*, 2023.
- **J Yamada**, K Pertsch, A Gunjal, JJ Lim, “Task-Induced Representation Learning”, *International Conference on Learning Representation (ICLR)*, 2022.

- **J Yamada\***, Y Lee\*, G Salhotra, K Pertsch, M Pflueger, GS Sukhatme, JJ Lim, P Englert, “Motion Planner Augmented Reinforcement Learning for Robot Manipulation in Obstructed Environments”, *Conference on Robot Learning (CoRL)*, 2020.
- **J Yamada**, J Shawe-Taylor, Z Fountas, “Evolution of a Complex Predator-Prey Ecosystem on Large-Scale Multi-Agent Deep Reinforcement Learning”, *International Joint Conference on Neural Network (IJCNN)*, 2020.

## PROFESSIONAL EXPERIENCE

<b>OMRON SINIC X, Inc.</b> · Tokyo, Japan <i>Research Intern</i> with Dr. Kazutoshi Tanaka and Dr. Masashi Hamaya	<b>03/2021 – 09/2021</b>
• Research in imitation learning for bimanual manipulation (IEEE Humanoid Robotics, 2023)	
<b>University of Southern California</b> · , United States <i>Visiting Researcher</i> with Professor Joseph J. Lim	<b>10/2019 – 10/2021</b>
• Research in “Motion Planner Augmented Reinforcement Learning for Robot Manipulation in Obstructed Environments” (CoRL 2020) and “Task-Induced Representation Learning” (ICLR 2022)	
<b>SE4, Inc.</b> · Tokyo, Japan <i>Research Intern</i> with Dr. Hirokatsu Kataoka and Dr. Shunsuke Saito	<b>09/2019 – 10/2019</b>
• Research in computer graphics	
<b>Grid, Inc.</b> · Tokyo, Japan <i>Machine Learning Engineer</i>	<b>08/2017 – 08/2018</b>
<b>KitchHike, Inc.</b> · Tokyo, Japan <i>Software Engineer Intern</i>	<b>04/2016 – 08/2016</b>
<b>WealthNavi, Inc.</b> · Tokyo, Japan <i>Software Engineer Intern</i>	<b>04/2015 – 08/2015</b>
<b>Div, Inc.</b> · Tokyo, Japan <i>Software Engineer Intern</i>	<b>09/2014 – 04/2016</b>

## HONOURS AND AWARDS

- Best Poster Award at The 4<sup>th</sup> UK Manipulation Workshop
- Scholarship: Learning Real-World Collaborative Assembly Tasks Through Observation, Action and Interaction

## REVIEWING SERVICE

- International Conference on I Robotics and Automation (ICRA), 2024
- International Conference on Intelligent Robotics and Systems (IROS), 2023.
- International Conference on Ubiquitous Robots (UR), 2023
- International Conference on Robotics and Automation (ICRA), 2023.
- Asian Conference on Machine Learning (ACML), Workshop on Machine Learning for Mobile Robot Vision and Control (MRVC), 2021.

## TEACHING SERVICE

- B20 Machine Learning, Department of Engineering Science, University of Oxford

## PRESS COVERAGE

- [An open-source benchmark to evaluate the manipulation and planning skills of assembly robots](#), by Ingrid Fadelli, *Tech Explore*,