Chenhao Li

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EDUCATION

ETH AI Center, Zurich, Switzerland — *11.2023 - present*
Ph.D. at Robotic Systems Lab and Learning & Adaptive Systems Group — ***Doctoral Fellowship***

ETH Zurich, Zurich, Switzerland — *09.2020 - 08.2023*
M.Sc. in Robotics, Systems and Control, 5.98 / 6.0 — ***ETH Medal***

Tongji University, Shanghai, China — *09.2015 - 07.2020*
B.Eng. in Mechanical Engineering, 4.93 / 5.0 — ***Excellent Graduate***

WORK EXPERIENCE

Visiting Researcher, Massachusetts Institute of Technology, United States — *01.2023 - 08.2023*

- Self-supervised structured robot dynamics learning (PAE, FLD).
- Intelligent adaptive curriculum learning in continuous task space (ALP-GMM).

Research Intern, Max Planck Institute for Intelligent Systems, Germany — *04.2022 - 12.2022*

- Agile robot skill development with generative adversarial imitation learning (AMP, WASABI).
- Intrinsic skill diversification through mutual information maximization (DIAYN, DADS, DISDAIN, CASSI).
- Morphology-inspired robot learning with graph neural networks (GCN, NerveNet).

PUBLICATIONS

Robotic World Model: A Neural Network Simulator for Robust Policy Optimization in Robotics
Chenhao Li, *Andreas Krause, Marco Hutter* — *preprint*

- *model-based reinforcement learning method for robust policy optimization*

Toward Task Generalization via Memory Augmentation in Meta-Reinforcement Learning
Kaixi Bao, ***Chenhao Li****, Yarden As, Andreas Krause, Marco Hutter* — *preprint*

- *memory-enhanced meta-reinforcement learning for improved task generalization*

Learning More With Less:
Sample Efficient Dynamics Learning and Model-Based RL for Loco-Manipulation — *preprint*
Benjamin Hoffman, Jin Cheng, ***Chenhao Li****, Stelian Coros*

- *uncertainty-informed dynamics learning for efficient policy learning*

DFM: Deep Fourier Mimic for Expressive Dance Motion Learning — *ICRA 2025*
Ryo Watanabe, ***Chenhao Li****, Marco Hutter*

- *efficient motion representation with frequency-domain parameterization for expressive policy learning*

FLD: Fourier Latent Dynamics for Structured Motion Representation and Learning *ICLR 2024*
Chenhao Li**, Elijah Stanger-Jones, Steve Heim, Sangbae Kim* ***spotlight

- *spatial-temporal representation of high-dimension, long-horizon, highly nonlinear inputs*

Learning Diverse Skills for Local Navigation under Multi-constraint Optimality *ICRA 2024*
*Jin Cheng, Marin Vlastelica, Pavel Kolev, **Chenhao Li**, Georg Martius*

Versatile Skill Control via Self-supervised Imitation of Unlabeled Mixed Motions *ICRA 2023*
***Chenhao Li**, Sebastian Blaes, Pavel Kolev, Marin Vlastelica, Jonas Frey, Georg Martius*

- *unsupervised skill discovery in generative adversarial demonstration learning*

Learning Agile Skills via Adversarial Imitation of Rough Partial Demonstrations *CoRL 2022 oral*
Chenhao Li**, Marin Vlastelica, Sebastian Blaes, Jonas Frey, Felix Grimminger, Georg Martius* ***best paper finalist

- *agile skill learning from limited demonstrations*

AWARDS

ETH Medal (0.5%) *04.2023*
ETH AI Center Doctoral Fellowship (1%) *03.2023*
Best Paper Award Finalist (CoRL 2022) *12.2022*
Swiss-European Mobility Scholarship *10.2022*
ETH Scholarship *02.2022, 02.2023*
National Scholarship (0.2%) *11.2018, 11.2016*

INVITED TALKS

JSK Lab, University of Tokyo, Japan *01.2025*
Sony AI, Japan *01.2025*
Toyota Research Institute, United States *03.2024*
Shirley Ryan AbilityLab, Northwestern University, United States *03.2024*
The Robotics Institute, Carnegie Mellon University, United States *03.2024*
AI4CE Lab, New York University, United States *03.2024*
Learning & Adaptive Systems Group, ETH Zurich, Switzerland *11.2023*
Biomimetic Robotics Lab, Massachusetts Institute of Technology, United States *01.2023*
Machines in Motion Laboratory, New York University, United States *12.2022*
Robotic Systems Lab, ETH Zurich, Switzerland *08.2022*

REVIEWER SERVICE

IROS, ICRA, CoRL, RA-L, RLC, ICLR, RSS, ICML *2023 - present*