

Jin Cheng

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EDUCATION

Doctoral student in Computer Science, ETH Zürich, Switzerland <i>Advisor: Prof. Dr. Stelian Coros (ETH Zürich), Prof. Dr. Guanya Shi (Carnegie Mellon University)</i>	since 10/2023
M.Sc. in Mechanical Engineering, ETH Zürich, Switzerland	09/2020 – 07/2023
B.E. in Vehicle Engineering, Tsinghua University, China	09/2016 – 07/2020

RESEARCH EXPERIENCE

Scientific Assistant, ETH Zürich <i>Computational Robotics Lab (CRL), supervised by Prof. Dr. Stelian Coros</i>	since 10/2023
Research Intern, Max Planck Institute for Intelligent Systems <i>Autonomous Learning Group, supervised by Prof. Dr. Georg Martius</i>	04/2023 - 09/2023
Research Assistant, ETH Zürich <i>Computational Robotics Lab (CRL), supervised by Prof. Dr. Stelian Coros</i>	11/2022 - 03/2023
Semester and Master Thesis, ETH Zürich <i>Robotic Systems Lab (RSL), supervised by Prof. Dr. Marco Hutter</i>	03/2022 - 11/2022
Research Assistant and Bachelor Thesis, Tsinghua University <i>State Key Laboratory of Intelligent Green Vehicle and Mobility, supervised by Prof. Dr. Qing Zhou</i>	09/2019 - 05/2020

PUBLICATIONS

RAMBO: RL-augmented Model-based Optimal Control for Whole-body Loco-manipulation (Under Review) <i>Jin Cheng, Dongho Kang, Gabriele Fadini, Guanya Shi, Stelian Coros</i>	04/2025
CAIMAN: Causal Action Influence Detection for Sample Efficient Loco-manipulation (Under Review) <i>Yuan Chen Yuan, Jin Cheng, Núria Armengol Urpí, Stelian Coros</i>	02/2025
Spatio-Temporal Motion Retargeting for Quadruped Robots (Under Review) <i>Taerim Yoon, Dongho Kang, Seungmin Kim, Minsung Ahn, Jin Cheng, Stelian Coros, Sungjoon Choi</i>	02/2025
SATA: Safe and Adaptive Torque-Based Locomotion Policies Inspired by Animal Learning (RSS 2025) <i>Peizhuo Li, Hongyi Li, Ge Sun, Jin Cheng, Xinrong Yang, Guillaume Bellegarda, Milad Shafiee, Yuhong Cao, Auke Ijspeert, Guillaume Sartoretti</i>	02/2025
DARE: Diffusion Policy for Autonomous Robot Exploration (ICRA 2025) <i>Yuhong Cao, Jeric Lew, Jingsong Liang, Jin Cheng, Guillaume Sartoretti</i>	02/2025
RobotKeyframing: Learning Locomotion with High-Level Objectives via Mixture of Dense and Sparse Rewards (CoRL 2024) <i>Fatemeh Zargarbashi, Jin Cheng, Dongho Kang, Robert Sumner, and Stelian Coros</i>	09/2024
Offline Diversity Maximization Under Imitation Constraints (RLC 2024) <i>Marin Vlastelica, Jin Cheng, Georg Martius, Pavel Kolev</i>	05/2024
Learning Diverse Skills for Local Navigation under Multi-constraint Optimality (ICRA 2024) <i>Jin Cheng, Marin Vlastelica, Pavel Kolev, Chenhao Li, Georg Martius</i>	02/2024

RL + Model-based Control:

Using On-demand Optimal Control to Learn Versatile Legged Locomotion ([RA-L](#))

Dongho Kang, Jin Cheng, Miguel Zamora, Fatemeh Zargarbashi, Stelian Coros

09/2023

Haptic Teleoperation of High-dimensional Robotic Systems

Using a Feedback MPC Framework ([IROS 2022](#))

Jin Cheng, Firas Abi-Farraj, Farbod Farshidian, Marco Hutter

10/2022

TEACHING EXPERIENCE

Computational Models of Motion ([263-5807-00](#))

02/2025 - 07/2025

Computational Robotics Lab (CRL) at ETH Zürich, lectured by S. Coros

Probabilistic Artificial Intelligence ([263-5210-00](#))

08/2024 - 02/2025

Learning & Adaptive Systems Group (LAS) at ETH Zürich, lectured by A. Krause

Introduction to Machine Learning ([252-0220-00](#))

02/2024 - 08/2024

Learning & Adaptive Systems Group (LAS) at ETH Zürich, lectured by F. Perez Cruz, F. Yang

Dynamic Programming and Optimal Control ([151-0563-01](#))

08/2022 - 02/2023

Institute for Dynamic Systems and Control (IDSC) at ETH Zürich, lectured by R. D'Andrea

Recursive Estimation ([151-0566-00](#))

02/2022 - 08/2022

Institute for Dynamic Systems and Control (IDSC) at ETH Zürich, lectured by R. D'Andrea

Dynamic Programming and Optimal Control ([151-0563-01](#))

08/2021 - 02/2022

Institute for Dynamic Systems and Control (IDSC) at ETH Zürich, lectured by R. D'Andrea

SKILLS

Language: Chinese (Native), English (C1), German (B2)

Programming: Python, C++, MATLAB, Git, Docker, L^AT_EX, PyTorch, ROS (Robot Operating System)

SERVICES

Reviewer: RLC, SIGGRAPH, RA-L, ICRA, IROS

SCHOLARSHIPS AND AWARDS

Outstanding Teaching Assistant Award

03/2022

ETH Zürich

Zürich, Switzerland

Friends of Tsinghua Scholarship – German Scholarship

10/2019

Tsinghua University

Beijing, China

Academic Excellence Scholarship

10/2018, 10/2019

Tsinghua University

Beijing, China

Volunteer Public Service Scholarship

10/2018

Tsinghua University

Beijing, China

Integrated Excellence Scholarship

10/2017

Tsinghua University

Beijing, China

14.04.2025