Haozhi Qi

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Current Appointments

2025 - Present	**Amazon FAR ,** Applied Scientist II
	Dexterous Manipulation

Education

2018 - 2025	**University of California, Berkeley**
	Ph.D. in Electrical Engineering and Computer Science
	Advisors: Prof. Yi Ma and Prof. Jitendra Malik
	Thesis: Multisensory Dexterity for Robotics
2013 - 2018	**Hong Kong University of Science and Technology**
	Bachelor of Science in Mathematics
	Bachelor of Science in Computer Science

Past Experience

2025	**Meta FAIR,** Research Scientist
	Dexterous Manipulation at Embodied AI Group
2022 - 2025	**Meta FAIR,** Visiting Researcher
	Dexterous Manipulation at Embodied AI Group
2017 - 2018	**Microsoft Research Asia,** Research Intern
	Object Detection at Visual Computing Group
2016	**Microsoft Research Asia,** Research Intern
	Object Detection at Visual Computing Group

Honors and Awards

2025	Lotfi A. Zadeh Prize
	For outstanding PhD research in soft computing and its applications
2024	EECS Evergreen Award for Undergraduate Researcher Mentoring
2021 - 2023	Meta AI Research Academic Grant
2023	Outstanding Demo Award at NeurIPS Robot Learning Workshop
2022	Best Paper Award at CVPR Multimodal Learning Workshop
2013 - 2017	HKUST Undergrad Scholarship
2016	Winner of Segmentation Track, MS COCO Challenge

Publications (* indicates equal contribution; † indicates equal advising)

Peer-reviewed Publications

2026   P.1   Elvis Hsieh*, Wen-Han Hsieh*, Yen-Jen Wang*, Toru Lin, Jitendra Malik, Koushil Sreenath[†], **Haozhi Qi**[†]. Learning Dexterous Manipulation Skills from Imperfect Simulations.
International Conference on Robotics and Automation (**ICRA**), 2026

P.2   Irmak Guzey, **Haozhi Qi**, Julen Urain, Changhao Wang, Jessica Yin, Krishna Bodduluri, Mike Lambeta, Lerrel Pinto, Akshara Rai, Jitendra Malik, Tingfan Wu, Akash Sharma, Homanga Bharadhwaj. Dexterity from Smart Lenses: Multi-Fingered Robot Manipulation with In-the-Wild Human Demonstrations.
International Conference on Robotics and Automation (**ICRA**), 2026

2025   P.3   **Haozhi Qi**, Brent Yi, Mike Lambeta, Yi Ma, Roberto Calandra, Jitendra Malik. From Simple to Complex Skills: The Case of In-Hand Object Reorientation.
International Conference on Robotics and Automation (**ICRA**), 2025

P.4   Himanshu Gaurav Singh*, Antonio Loquercio*, Carmelo Sferrazza, Jane Wu, **Haozhi Qi**, Pieter Abbeel, Jitendra Malik. Hand-Object Interaction Pretraining from Videos.
International Conference on Robotics and Automation (**ICRA**), 2025

P.5   Toru Lin, Yu Zhang*, Qiyang Li*, **Haozhi Qi***, Brent Yi, Sergey Levine, Jitendra Malik. Learning Visuotactile Skills with Two Multifingered Hands.
International Conference on Robotics and Automation (**ICRA**), 2025

P.6   Jessica Yin, **Haozhi Qi**, Jitendra Malik, James Pikul, Mark Yim, Tess Hellebrekers. Learning In-Hand Translation Using Tactile Skin With Shear and Normal Force Sensing.
International Conference on Robotics and Automation (**ICRA**), 2025

2024   P.7   Sudharshan Suresh, **Haozhi Qi**, Tingfan Wu, Taosha Fan, Luis Pineda, Mike Lambeta, Jitendra Malik, Mrinal Kalakrishnan, Roberto Calandra, Michael Kaess, Joe Ortiz, Mustafa Mukadam. Neural Feels with Neural Fields: Visuo-Tactile Perception for In-Hand Manipulation.
Science Robotics, November 2024

P.8   Jun Wang*, Ying Yuan*, Haichuan Che*, **Haozhi Qi***, Yi Ma, Jitendra Malik, Xiaolong Wang. Lessons from Learning to Spin "Pens".
Conference on Robot Learning (**CoRL**), 2024

P.9   Toru Lin*, Zhao-Heng Yin*, **Haozhi Qi**, Pieter Abbeel, Jitendra Malik. Twisting Lids Off with Two Hands.
Conference on Robot Learning (**CoRL**), 2024

2023   P.10   **Haozhi Qi**, Brent Yi, Sudharshan Suresh, Mike Lambeta, Yi Ma, Roberto Calandra, Jitendra Malik. General In-Hand Object Rotation with Vision and Touch.
Conference on Robot Learning (**CoRL**), 2023

2022   P.11   **Haozhi Qi***, Ashish Kumar*, Roberto Calandra, Yi Ma, Jitendra Malik. In-Hand Object Rotation via Rapid Motor Adaptation.
Conference on Robot Learning (**CoRL**), 2022

P.12   Zipeng Fu*, Ashish Kumar*, Ananye Agarwal, **Haozhi Qi**, Jitendra Malik, Deepak Pathak. Coupling Vision and Proprioception for Navigation of Legged Robots.
Computer Vision and Pattern Recognition (**CVPR**), 2022

P.13 Kwan Ho Ryan Chan*, Yaodong Yu*, Chong You*, **Haozhi Qi**, John Wright, Yi Ma. ReduNet: A White-box Deep Network from the Principle of Maximizing Rate Reduction.
Journal of Machine Learning Research (**JMLR**), accepted in 2022

2021 P.14 **Haozhi Qi**, Xiaolong Wang, Deepak Pathak, Yi Ma, Jitendra Malik. Learning Long-term Visual Dynamics with Region Proposal Interaction Networks.
International Conference on Learning Representations (**ICLR**), 2021

2020 P.15 **Haozhi Qi**, Chong You, Xiaolong Wang, Yi Ma, Jitendra Malik. Deep Isometric Learning for Visual Recognition.
International Conference on Machine Learning (**ICML**), 2020

2019 P.16 Yichao Zhou, **Haozhi Qi**, Jingwei Huang, Yi Ma. NeurVPS: Neural Vanishing Point Scanning via Conic Convolution.
Neural Information Processing System (**NIPS**), 2019

P.17 Yichao Zhou, **Haozhi Qi**, Yuexiang Zhai, Qi Sun, Zhili Chen, Li-Yi Wei, Yi Ma. Learning to Reconstruct 3D Manhattan Wireframes from a Single Image.
International Conference on Computer Vision (**ICCV**), 2019
(*Oral, 4.3% acceptance rate*)

P.18 Yichao Zhou, **Haozhi Qi**, Yi Ma. End-to-End Wireframe Parsing.
International Conference on Computer Vision (**ICCV**), 2019

2017 P.19 Jifeng Dai*, **Haozhi Qi***, Yuwen Xiong*, Yi Li*, Guodong Zhang*, Han Hu, Yichen Wei. Deformable Convolutional Networks.
International Conference on Computer Vision (**ICCV**), 2017
(*Oral, 2.1% acceptance rate*)
ICCV 2017's Most Influential Paper #5

P.20 Yi Li*, **Haozhi Qi***, Jifeng Dai, Xiangyang Ji, Yichen Wei. Fully Convolutional Instance-aware Semantic Segmentation.
Computer Vision and Pattern Recognition (**CVPR**), 2017
(*Spotlight, 8.0% acceptance rate*)

Pre-prints

2025 P.21 Jessica Yin, **Haozhi Qi***, Youngsun Wi*, Sayantan Kundu, Mike Lambeta, William Yang, Changhao Wang, Tingfan Wu, Jitendra Malik, Tess Hellebrekers. OSMO: Open-Source Tactile Glove for Human-to-Robot Skill Transfer.
Tech Report, December 2025

P.22 Chaoyi Pan, Changhao Wang, **Haozhi Qi**, Zixi Liu, Homanga Bharadhwaj, Akash Sharma, Tingfan Wu[†], Guanya Shi[†], Jitendra Malik[†], Francois Hogan[†]. SPIDER: Scalable Physics-Informed Dexterous Retargeting.
Tech Report, November 2025

2024 P.23 Mike Lambeta, Tingfan Wu, Ali Sengül, Victoria Rose Most, Nolan Black, Kevin Sawyer, Romeo Mercado, **Haozhi Qi**, Chaithanya Krishna Bodduluri, Alexander Sohn, Byron Taylor, Norb Tydingco, Gregg Kammerer, Dave Stroud, Jake Khatha, Kurt Jenkins, Kyle Most, Neal Stein, Ricardo Chavira, Thomas Craven-Bartle, Eric Sanchez, Yitian Ding, Jitendra Malik, Roberto Calandra. Digitizing Touch with an Artificial Multimodal Fingertip.
Tech Report, November 2024

| 2023 | P.24 | Carolina Higuera, Joseph Ortiz, **Haozhi Qi**, Luis Pineda, Byron Boots, Mustafa Mukadam. Perceiving Extrinsic Contacts from Touch Improves Learning Insertion Policies.
Tech Report, September 2023 |

Press Coverage

2024	Digitizing Touch with an Artificial Multimodal Fingertip TechCrunch, VentureBeat, The Robot Report Twisting Lids Off with Two Hands The AI Grid
2023	General In-hand Object Rotation with Vision and Touch New Scientist (UK), TU Dresden News
2022	In-Hand Object Rotation via Rapid Motor Adaptation MarkTechPost

Talks

2025	The Atomic Skill Approach to Robotic Dexterity ELLIIT Symposium and Focus Period on Robot Learning UT Austin RPL Seminar UC Berkeley EMBER Seminar Series
2025	Multisensory Dexterity for Robotics University of Chicago (Department of Computer Science) UC San Diego (Department of Computer Science and Engineering) New York University (Electrical and Computer Engineering & Mechanical Engineering) Rutgers University (Department of Computer Science) Georgia Institute of Technology (School of Interactive Computing) Princeton University (Department of Computer Science) University of Michigan (Computer Science and Engineering Department & Robotics Department) The University of Hong Kong (School of Computing and Data Science)
2024	Manipulation and Perception with Multisensory Robot Hands Columbia University (hosted by Prof. Matei Ciocarlie) Princeton University (hosted by Prof. Jia Deng) New York University (hosted by Prof. Lerrel Pinto) Carnegie Mellon University (hosted by Prof. Katerina Fragkiadaki) University of Pennsylvania (hosted by Prof. Mark Yim) University of Illinois Urbana-Champaign (hosted by Prof. Justin Yim) Stanford University (Stanford Vision and Learning Lab)
2023	General In-hand Object Rotation with Vision and Touch Columbia University (hosted by Prof. Matei Ciocarlie) UC San Diego (hosted by Prof. Xiaolong Wang) Bay Area Computer Vision Day

Teaching

Guest Lectures

2025	Sim2Real: The Winding but Necessary Road to Dexterity
	[UChicago] [CMSC 20600] "Introduction to Robotics" by Prof. Sarah Sebo
	[UPenn] [ESE 6510] "Physical Intelligence: Science and Systems" by Prof. Antonio Loquercio
2024	Reinforcement Learning and Sim-to-Real
	[UC Berkeley] [CS294-277] "Robots That Learn" by Prof. Jitendra Malik
	Manipulation with Multi-fingered Hands
	[UIUC] [CS598YL] "Deep Learning for Robotic Manipulation" by Prof. Yunzhu Li
	[UC Berkeley] [EECS106B] "Robotic Manipulation and Interaction" by Prof. Shankar Sastry

Teaching Assistant

2021 Spring	Robotic Manipulation and Interaction
	Teaching Assistant with Prof. Yi Ma and Prof. Shankar Sastry
2020 Spring	Designing, Visualizing and Understanding Deep Neural Networks
	Teaching Assistant with Prof. John Canny
2019 Fall	High-dim Data Analysis with Low-dim Models
	Teaching Assistant with Prof. Yi Ma

Service

Workshop Organizer

2025	[CoRL] Dexterous Manipulation: Learning and Control with Diverse Modalities
	[RSS] Dexterous Manipulation: Learning and Control with Diverse Data
	[ICRA] Handy Moves: Dexterity in Multi-Fingered Hands
2024	[NeurIPS] Touch Processing: From Data to Knowledge
	[CoRL] Learning Robot Fine and Dexterous Manipulation: Perception and Control
	[RSS] Dexterous Manipulation: Design, Perception and Control
2023	[NeurIPS] Touch Processing: a New Sensing Modality for AI

Area Chair

| Robotics | RSS 26 |

Reviewer

Robotics	ICRA 21/24-26, CoRL 24-25, RSS 24-25, IROS 24-25, RA-L 23-25, T-RO 24-25, IJRR 24
	Humanoids 24, Science Robotics 24-25
Vision	CVPR 19-26, ICCV 19/21/23/25, ECCV 20/22/24, T-PAMI 20-22, IJCV 20-21
Learning	ICLR 22-23/25-26, ICML 21-26, NeurIPS 20-25, TMLR 22-25, AAAI 20-23

Community Service

2024	**Faculty Hiring Student Committee**, UC Berkeley
2021 - 2023	**Mentor**, Undergrad from Underrepresented Backgrounds
2020	**Graduate Admissions Committee**, UC Berkeley