Haozhi Qi

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GScholar Link

Current Appointments

2025 - Present Amazon FAR, Senior Applied Scientist

Dexterous Manipulation

2026 - Present University of Chicago

Assistant Professor in Computer Science

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

Outstanding Demo Award at NeurIPS Robot Learning Workshop
 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)

Peer-reviewed Publications

- 2025 P.1 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.2 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.3 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.4 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.5 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.6 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.7 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.8 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.9 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.10 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.11 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.12 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

P.13 Haozhi Qi, Chong You, Xiaolong Wang, Yi Ma, Jitendra Malik. Deep Isometric Learning for Visual Recognition.
 International Conference on Machine Learning (ICML), 2020

 P.14 Yichao Zhou, Haozhi Qi, Jingwei Huang, Yi Ma. NeurVPS: Neural Vanishing Point Scanning via Conic Convolution.

P.15 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.16 Yichao Zhou, Haozhi Qi, Yi Ma. End-to-End Wireframe Parsing.
International Conference on Computer Vision (ICCV), 2019

Neural Information Processing System (NIPS), 2019

2017 P.17 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.18 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

P.19 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.20 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

Digitizing Touch with an Artificial Multimodal Fingertip TechCrunch, VentureBeat, The Robot Report Twisting Lids Off with Two Hands
 The AI Grid
 General In-hand Object Rotation with Vision and Touch New Scientist (UK), TU Dresden News
 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 21-25, NeurIPS 20-25, TMLR 22-25, AAAI 20-23

Community Service

2026 PhD Admissions Committee, UChicago

2024 Faculty Hiring Student Committee, UC Berkeley

2021 - 2023 Mentor, Undergrad from Underrepresented Backgrounds

2020 Graduate Admissions Committee, UC Berkeley