王久光 · Jiuguang Wang
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PROFILE

Senior engineering leader with 16 years of experience in robotics and AI, particularly in the areas of humanoid robots, robotic manipulators, and autonomous vehicles. Extensive experience of being the founding engineer, single-threaded owner of large technical efforts, and building sizable organizations from zero, in both production and research settings. Currently the Chief Scientist at Multiply Labs, Inc, and previously part of the founding team at the RAI Institute (formerly known as the Boston Dynamics AI Institute) and head of dexterous/mobile manipulation. Strong track record of publishing at top robotics journals and conferences. Recipient of the 2026 IEEE Robotics and Automation Letters Best Paper Award, ICRA 2024 Best Paper Award in Cognitive Robotics; CoRL 2024 Outstanding Paper Award Finalist; 2009 IEEE Humanoids Best Paper Award Finalist; ACC 2012 Best Paper in Session Award.

EDUCATION

PhD in Robotics **August 2015**
Master of Science in Robotics **August 2014**
Carnegie Mellon University, Robotics Institute, Pittsburgh, PA
Advised by: Prof. Christopher G Atkeson; Committee: Prof. Stefan Schaal, Prof. Koushil Sreenath, & Prof. Bruno Sinopoli
U.S. National Science Foundation Graduate Research Fellowship (2010-2013)

Master of Science in Mechanical Engineering **May 2010**
Master of Science in Electrical and Computer Engineering **May 2009**
Georgia Institute of Technology, School of Electrical & Computer Engineering & Mechanical Engineering, Atlanta, GA
Advised by: Prof. Mike Stilman, Prof. Magnus Egerstedt, and Prof. Ayanna Howard

Bachelor of Science in Electrical Engineering **May 2008**
Bachelor of Science in Computer Science **May 2008**
Georgia Institute of Technology, School of Computer Science & Electrical & Computer Engineering, Atlanta, GA
Advised by: Prof. Magnus Egerstedt, Prof. Ayanna Howard, and Prof. Tucker Balch

WORK EXPERIENCE

Chief Scientist **November 2025 - Present**
Multiply Labs, Inc, San Francisco, CA

- Led dexterous/mobile manipulation research for biopharmaceutical manufacturing (e.g. CAR-T therapy for cancer)
- Built the research division from the ground up, 0 → 20 staff members
- Joint work with academic (Cornell/Harvard/Stanford/Columbia) & industry (Physical Intelligence/Nvidia) partners

Research Lead, Dexterous Mobile Manipulation **September 2022 - October 2025**
RAI Institute (formerly known as the Boston Dynamics AI Institute), Cambridge, MA

- Part of the founding team (2nd employee, 1st engineering hire), helped grow the organization to 300+ staff in 3yr
- Led Dexterous Mobile Manipulation (DMM), ~40 members across research scientists & engineers (SW, HW, ML)
- As first engineer, authored/created company-wide infra: IT, monorepo, Docker & CI, Google Cloud, ROS2, etc
- As research lead, spearheaded the DMM vision across manipulation, task planning, and mapping & navigation
- Produced publications in top-tier robotics venues: 5 journal & 15 conference papers; 4 best paper awards
- Led organizational planning, budget ($XXm), performance management, and interfaced with senior leadership

Director of Engineering **January 2022 - August 2022**
Magna Advanced Development Center, Boston, MA

- Responsible for Drive Policy research and development for L2/L3 ADAS on prototype and production platforms
- Led teams in behavior planning, prediction, motion planning, and controls
- Led organizational planning, budget ($Xm), performance management, recruiting, and organizational initiatives

Director of Engineering **November 2020 - December 2021**
Optimus Ride Inc (Acquired by Magna), Boston, MA

- Responsible for all areas of research and development for decision making in the vehicle autonomy software stack
- Led teams in behavior planning, prediction, motion planning, controls, and firmware.
- Collaborated with perception/mapping/localization/machine learning/safety/simulation/data engineering/etc

- Led milestone/OKR/sprint planning, budget/performance management, recruiting, and organizational initiatives

Co-Founder & CTO **March 2018 - November 2020**
Mach Five, Inc, San Francisco, CA

- Led the research and development of reinforcement learning algorithms with applications to autonomous driving
- Recruited and managed a team of engineers with diverse backgrounds and led product/program management
- Led company through first funding round and coauthored two provisional patents

Senior Research Scientist **August 2015 - March 2018**
Special Projects Group, Apple Inc, Cupertino, CA

- Developed algorithms for the motion planning and control of an autonomous vehicle
- Led a team to develop a high fidelity simulator in support of controls and reinforcement learning development
- Led efforts in creating product requirements documents and advised senior leadership

Research Assistant to Prof. Christopher G Atkeson **August 2010 - August 2015**
Robotics Institute, Carnegie Mellon University

- Developed algorithms for nonlinear trajectory optimization and receding-horizon control under uncertainty
- Implemented motion planning and control for bipedal humanoid robots to perform challenging dynamic tasks
- Contributed to the DARPA Maximum Mobility and Manipulation (M3) and DARPA Robotics Challenge (2015)
- Awarded the U.S. National Science Foundation Graduate Research Fellowship (2010-2013)
- Awarded Best Paper in Session - American Control Conference (2012), Montreal, Canada

RESEARCH INTERNS

Supervised 38 research interns (2022-2026) within the Dexterous Mobile Manipulation team at RAI Institute

Naoki Yokoyama (PhD, Georgia Tech; at Apple)
Russell Mendonca (PhD, CMU; currently at Google)
Nishanth Kumar (PhD, MIT; currently at Meta)
Xiaoyi Cai (PhD, MIT; currently at Waymo)
Terry Suh (PhD, MIT; cofounder of CarbonSix)
Dian Wang (PhD, Northeastern; currently at Stanford)
Yuki Shirai (PhD, UCLA; currently at MERL)
Ashay Athalye (MS, MIT; currently at startup)
Jan Brüdigam (PhD, TU Munich; currently at RAI)
Huaijiang Zhu (PhD, NYU; currently at Alquirst)
Xinpei Ni (PhD, Georgia Tech)
Katrina Ashton (PhD, UPenn)
Adeeb Abbas (MS, Northeastern; currently at GM)
Maksim Sorokin (PhD, Georgia Tech; currently at RAI)
Chao Cao (PhD, CMU; cofounder of Sancho)
Yixuan Wang (PhD, Columbia; currently at Nvidia)
Sonia Raychaudhuri (PhD, Simon Fraser)
Minkyung Kim (PhD, UIUC)
Yun Chang (PhD, MIT; currently cofounder at startup)
Lujie Yang (PhD, MIT; currently at Amazon FAR)
Xuanlin Li (PhD, UCSD; currently at Hillbot)
Bike Zhang (PhD, Berkeley)
Yunhai Feng (PhD, Cornell)
Jianing Qian (PhD UPenn)
Ignat Georgiev (MS, Georgia Tech; currently at Tesla)
Lara Brudermüller (PhD, Oxford; at Amazon Robotics)
Simin Liu (PhD, CMU)
Ruihan Yang (PhD, UCSD; currently at Amazon FAR)
Albert Li (PhD, Caltech)
Yuxin Chen (PhD, Berkeley)
Dingqi Zhang (PhD, Berkeley; Multiply Labs)
Bo Ai (PhD, UCSD)
Ziyang Zhang (PhD, MIT)
Sudarshan Harithas (PhD, Brown)
Chen Yu (PhD, Northwestern)
Qi Wu (PhD, Cornell)
Prasanna Sriganesh (PhD, CMU)
Solvin Sigurdson (PhD, Caltech)
Wei-Cheng Huang (PhD, UIUC)

SKILLS

- Languages: Chinese (native), English (native)
- Development: C, C++, Python, and ROS/ROS2
- Version control and project management systems: Git, Jira / Confluence
- Machine learning frameworks: PyTorch, ray.io

PERSONAL

- Citizenship: People's Republic of China
- U.S. Permanent Resident (since 2005), authorized to work in the U.S. without restrictions

SELECTED PUBLICATIONS

Learning-Based Manipulation

- Huaijiang Zhu, Tong Zhao, Xinpei Ni, **Jiuguang Wang**, Kuan Fang, Ludovic Righetti, Tao Pang. Should We Learn Contact-Rich Manipulation Policies from Sampling-Based Planners? 2025. In IEEE Robotics and Automation Letters (RA-L), vol. 10, no. 6, pp. 6248-6255, June 2025. 2026 IEEE Robotics and Automation Letters Best Paper Award.
- Yixuan Wang, Guang Yin, Binghao Huang, Tarik Kelestemur, **Jiuguang Wang**, Yunzhu Li. GenDP: 3D Semantic Fields for Category-Level Generalizable Diffusion Policy. In 8th Annual Conference on Robot Learning (CoRL), Munich, Germany.
- Dian Wang, Stephen Hart, David Surovik, Tarik Kelestemur, Haojie Huang, Haibo Zhao, Mark Yeatman, **Jiuguang Wang**, Robin Walters, and Robert Platt. Equivariant Diffusion Policy. 2024. In 8th Annual Conference on Robot Learning (CoRL), Munich, Germany. CoRL 2024 Outstanding Paper Award Finalist. Also appeared in IJRR.

Loco-Manipulation

- Kuan Fang Yuxin Chen, Xinghao Zhu, Farzad Niroui, Lingfeng Sun, **Jiuguang Wang**. SAGA: Open-World Mobile Manipulation via Structured Affordance Grounding. 2026. In IEEE Robotics and Automation Letters (RA-L).
- John Z. Zhang, Maks Sorokin, Jan Brüdigam, Brandon Hung, Stephen Phillips, Dmitry Yershov, Farzad Niroui, Tong Zhao, Leonor Fermoselle, Xinghao Zhu, Chao Cao, Duy Ta, Tao Pang, **Jiuguang Wang**, Preston Culbertson, Zachary Manchester, Simon Le Cleac'h. Sumo: Dynamic and Generalizable Whole-Body Loco-Manipulation. In EEE Transactions on Robot Learning, 2026
- Xinghao Zhu, Yuxin Chen, Lingfeng Sun, Farzad Niroui, Simon Le Cleac'h, **Jiuguang Wang**, Kuan Fang. Versatile Loco-Manipulation through Flexible Interlimb Coordination. In 8th Annual Conference on Robot Learning (CoRL), Munich, Germany.
- Russell Mendonca, Emmanuel Panov, Bernadette Bucher, **Jiuguang Wang**, and Deepak Pathak. Continuously Improving Mobile Manipulation with Autonomous Real-World RL. 2024. In 8th Annual Conference on Robot Learning (CoRL), Munich, Germany.
- Mike Stilman, **Jiuguang Wang**, Kasemsit Teeyapan, and Ray Marceau. Optimized Control Strategies for Wheeled Humanoids and Mobile Manipulators. 2009. In 9th IEEE-RAS International Conference on Humanoid Robots, Paris, France. IEEE Humanoids Best Paper Award Finalist.

Navigation and Mapping

- Xiaoyi Cai, Siddharth Ancha, Lakshay Sharma, Philip R. Osteen, Bernadette Bucher, Stephen Phillips, **Jiuguang Wang**, Michael Everett, Nicholas Roy, Jonathan P. How. EVORA: Deep Evidential Traversability Learning for Risk-Aware Off-Road Autonomy. In IEEE Transactions on Robotics, vol. 40, pp. 3756-3777, 2024.
- Naoki Yokoyama, Sehoon Ha, Dhruv Batra, **Jiuguang Wang**, and Bernadette Bucher. VLFM: Vision-Language Frontier Maps for Zero-Shot Semantic Navigation. 2024. In 2024 IEEE International Conference on Robotics and Automation (ICRA), Yokohama, Japan. ICRA 2024 Best Paper Award in Cognitive Robotics.

Task and Motion Planning

- Yun Chang, Leonor Fermoselle, Duy-Nguyen Ta, Bernadette Bucher, Luca Carlone, and **Jiuguang Wang**. ASHiTA: Automatic Scene-grounded HIerarchical Task Analysis via Task-defined 3D Scene Graphs. 2025. In 2025 IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), Atlanta, Georgia.
- Ashay Athalye, Nishanth Kumar, Tom Silver, Yichao Liang, **Jiuguang Wang**, Tomás Lozano-Pérez, Leslie Pack Kaelbling. From Pixels to Predicates: Learning Symbolic World Models Via Pretrained VLMs. In IEEE Robotics and Automation Letters, vol. 11, no. 4, pp. 4002-4009, April 2026.