



## 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 leading Dexterous & Mobile Manipulation at the RAI Institute (formerly known as the Boston Dynamics AI Institute). Strong track record of publishing at top robotics journals and conferences. Recipient of the 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

### Research Lead, Dexterous Mobile Manipulation

September 2022 - Present

#### 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: 3 journal & 12 conference papers; 2 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

- 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**  
**Special Projects Group, Apple Inc, Cupertino, CA**

**August 2015 - March 2018**

- 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

**SELECTED PUBLICATIONS**

- Yun Chang, Leonor Fermoselle, Duy-Nguyen Ta, Bernadette Bucher, Luca Carlone, and **Jiuguang Wang**. ASHiTA: Automatic Scene-grounded Hlerarchical Task Analysis via Task-defined 3D Scene Graphs. 2025. In 2025 IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), Atlanta, Georgia.
- 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**.
- 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**.
- 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**.

**RESEARCH INTERNS**

Supervised 31 research interns (2022-2025) within the Dexterous Mobile Manipulation team at RAI Institute

Naoki Yokoyama (PhD, Georgia Tech; at Apple)	Minkyung Kim (PhD, UIUC)
Russell Mendonca (PhD, CMU; currently at Tesla)	Yun Chang (PhD, MIT)
Xiaoyi Cai (PhD, MIT; currently at Waymo)	Lujie Yang (PhD, MIT)
Terry Suh (PhD, MIT; currently at CarbonSix)	Xuanlin Li (PhD, UCSD; currently at Hillbot)
Dian Wang (PhD, Northeastern; currently at Stanford)	Bike Zhang (PhD, Berkeley)
Yuki Shirai (PhD, UCLA; currently at MERL)	Yunhai Feng (PhD, Cornell)
Ashay Athalye (MS, MIT; currently at startup)	Jianing Qian (PhD UPenn)
Jan Brüdigam (PhD, TU Munich; currently at RAI)	Ignat Georgiev (MS, Georgia Tech; currently at Tesla)
Huaijiang Zhu (PhD, NYU; currently at Alquist)	Lara Bruder Müller (PhD, Oxford)
Xinpei Ni (PhD, Georgia Tech)	Simin Liu (PhD, CMU)
Katrina Ashton (PhD, UPenn)	Ruihan Yang (PhD, UCSD)
Adeeb Abbas (MS, Northeastern; currently at RAI)	Albert Li (PhD, Caltech)
Maksim Sorokin (PhD, Georgia Tech; currently at RAI)	Yuxin Chen (PhD, Berkeley)
Chao Cao (PhD, CMU; currently at RAI)	Dingqi Zhang (PhD, Berkeley)
Yixuan Wang (PhD, Columbia)	Bo Ai (PhD, UCSD)
Sonia Raychaudhuri (PhD, Simon Fraser)	Ziyang Zhang (PhD, CMU)

**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