Jiachen Li

Durand Building, Stanford, CA 94305, USA

Personal Website Google Scholar jiachen_li@stanford.edu

Summary

The ultimate goal of my research is to build *trustworthy*, *human-centered* autonomous agents (e.g., autonomous vehicles, social robots) that can understand and reason about the physical world; safely interact and collaborate with humans and other agents; and efficiently coordinate with other intelligent agents so that they can serve humanity and society in daily lives. To achieve this goal, I have been pursuing interdisciplinary research and unifying the techniques and tools from robotics, machine learning, reinforcement learning, explainable AI, control theory, optimization, and computer vision.

Selected as an RSS Pioneer in robotics in 2022. Published 30 refereed papers in premier journals and conferences. Filed eight patent applications worldwide. Co-authored multiple grant proposals for government agencies (e.g., NSF, NASA) and industry partners (e.g., Honda). Organized more than ten workshops at premier international conferences (e.g., NeurIPS, ICCV, ICRA, IROS, IV, ITSC). Gave guest lectures and worked as a course/teaching assistant for seven courses. Mentored seventeen graduate students and eight undergraduate students on academic research. Serve as an associate editor or reviewer for more than 25 premier journals or conferences. Serve as an instructor or mentor for multiple university outreach programs.

Education

University of California, Berkeley **Berkeley, CA, USA**
Ph.D. in Mechanical Engineering (Robotics, Artificial Intelligence, Controls) *08/2016 – 10/2021*
– Academic advisor: Prof. Masayoshi Tomizuka
– Dissertation title: Relational Reasoning for Multi-Agent Systems
– Dissertation committee: Prof. Masayoshi Tomizuka (Chair), Prof. Anca Dragan, and Prof. Mark Mueller

Harbin Institute of Technology **Harbin, China**
B. Eng. in Automation (Honors School) *08/2012 – 07/2016*
– Academic advisors: Prof. Huijun Gao and Prof. Shen Yin
– Thesis title: Partial Least Squares and Its Application to Process Control

Research Experience

Stanford University **Stanford, CA, USA**
Postdoctoral Scholar *11/2021 - Present*
Faculty mentor: Prof. Mykel J. Kochenderfer
Affiliation: Stanford Intelligent Systems Laboratory (SISL) & Stanford Artifical Intelligence Laboratory (SAIL)
Duty: Coordinate and contribute to research projects at SISL on autonomous driving and social robot navigation (e.g., scene understanding, prediction, decision making, motion planning and control), multi-agent systems, reinforcement learning and control, graph neural networks, explainable AI, etc; Writing grant proposals; Mentoring graduate and undergraduate students at Stanford and in outreach programs; Teaching guest lectures.

University of California, Berkeley **Berkeley, CA, USA**
Graduate Student Researcher *08/2016 - 10/2021*
Faculty mentor: Prof. Masayoshi Tomizuka
Affiliation: Mechanical Systems Control (MSC) Laboratory & Berkeley DeepDrive (BDD) & Berkeley AI Research (BAIR)

Harbin Institute of Technology **Harbin, China**
Research Assistant *03/2014 - 06/2016*
Affiliation: Research Institute of Intelligent Control and System

Industry Work Experience

Waymo LLC — **Mountain View, CA, USA**
Software Engineer/Research Intern — *05/2021 - 10/2021*
Perception Team, Human Semantics Understanding and Trajectory Forecasting

Honda Research Institute US — **San Jose, CA, USA**
Research Intern — *09/2019 - 05/2021*
Machine Learning and Computer Vision Team, Scene Understanding and Decision Making

Toyota Research Institute — **Los Altos, CA, USA**
Research Intern — *06/2019 - 08/2019*
Machine Learning and Planning Teams, Behavior Prediction

Honors and Awards

- Robotics: Science and Systems (RSS) Pioneer Award — *2022*
  Selected as one of the world's 30 top early-career researchers in robotics
- Best Paper Award Runner Up, ICCV 2021 Workshop — *2021*
- Top Reviewer Award at ICML 2020 — *2020*
- UC Berkeley Graduate Student Travel Grant — *2018, 2019*
- Top Ten Outstanding Graduate at Harbin Institute of Technology — *2016*
- Chunhui Innovation Fellowship (Top 1.0%) — *2016*
  Awarded to exceptional undergraduate researchers in all disciplines at Harbin Institute of Technology
- Suzhou Industry Fellowship (Top 3.0%) — *2015*
- Meritorious Winner, Mathematical/Interdisciplinary Contest in Modeling — *2015*
- China Renmin Scholarship (Top 5.0%) — *2013 – 2016*

Publications

Ph.D. Dissertation

[1] Relational Reasoning for Multi-Agent Systems, 2021
Dissertation Committee: Masayoshi Tomizuka, Anca Dragan, and Mark Mueller

Under Review & Working Papers

[7] **J. Li**, D. Isele, K. Lee, J. Park, K. Fujimura and M. J. Kochenderfer, "Explainable Autonomous Navigation with Internal State Inference and Interactivity Estimation", submitted to *IEEE Transactions on Robotics*.

[6] **J. Li***, C. Hua*, J. Park, H. Ma, V. Dax and M. J. Kochenderfer, "Group-Aware Dynamic Relational Reasoning", submitted to *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR 2023)*.

[5] H. Ma, M. Huynh, **J. Li**, M. Tomizuka and C. Choi, "What features are Important for Uncertainty Estimation in Vehicle Trajectory Prediction?", submitted to *IEEE Transactions on Intelligent Transportation Systems*.

[4] **J. Li**, X. Shi*, F. Chen*, J. Stroud*, Z. Zhang, T. Lan, J. Mao, J. Kang, K. Refaat, W. Yang, E. Le and C. Li, "Pedestrian Crossing Action Recognition and Trajectory Prediction with 3D Human Keypoints", submitted to *IEEE Conference on Robotics and Automation (ICRA 2023)*.

[3] E. Sachdeva*, N. Agarwal*, S. Roelofs*, **J. Li**, C. Choi, B. Dariush and M. J. Kochenderfer, "Multimodal Dataset and Benchmark for Joint Driving Risk Ranking and Reasoning", to be submitted to *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR 2023)*.

[2] M. Toyungyernsub, E. Yel, **J. Li** and M. J. Kochenderfer, "Predicting Future Spatiotemporal Occupancy Grids with Semantics for Autonomous Driving", submitted to *IEEE Conference on Robotics and Automation (ICRA 2023)*.

[1] K. Hatch, **J. Li** and M. J. Kochenderfer, "A Review of Neural Monte Carlo Tree Search Methods", in preparation.

Refereed Journal Articles

[6] **J. Li**, H. Ma, Z. Zhang, J. Li and M. Tomizuka, "Spatio-Temporal Graph Dual-Attention Network for Multi-Agent Prediction and Tracking", *IEEE Transactions on Intelligent Transportation Systems*, 2021. (**Impact Factor: 6.492**)

[5] H. Ma*, Y. Sun*, **J. Li**, M. Tomizuka and C. Choi, "Continual Multi-agent Interaction Behavior Prediction with Conditional Generative Memory", *IEEE Robotics and Automation Letters*, 2021. (**Impact Factor: 3.74**)

[4] **J. Li**, W. Zhan, Y. Hu and M. Tomizuka, "Generic Tracking and Prediction Framework and Its Application in Autonomous Driving", *IEEE Transactions on Intelligent Transportation Systems*, 21(9), 3634-3649, 2020. (**Impact Factor: 6.319**)

[3] **J. Li**, C. Duan and Z. Fei, "A Novel Variable Selection Approach for Redundant Information Elimination Purpose of Process Control", *IEEE Transactions on Industrial Electronics*, 63(3), 1737-1744, 2016. (**Impact Factor: 7.515**)

[2] C. Duan, Z. Fei and **J. Li**, "A Variable Selection Aided Residual Generator Design Approach for Process Control and Monitoring", *Neurocomputing*, 171, 1013-1020, 2016. (**Impact Factor: 5.719**)

[1] S. Shi, Z. Fei and **J. Li**, "Finite-time Hinf Control of Switched Systems with Mode-dependent Average Dwell Time", *Journal of the Franklin Institute*, 353(1), 221-234, 2016. (**Impact Factor: 4.036**)

Conference Proceedings

[24] F. Sun, I. Kauvar, R. Zhang, **J. Li**, M. J. Kochenderfer, J. Wu and N. Haber, "Interaction Modeling with Multiplex Attention", in *Advances in Neural Information Processing Systems (NeurIPS)*, 2022. (**Acceptance Rate: 25.6%**)

[23] J. Han, W. Huang, H. Ma, J. Li, J. B. Tenenbaum and C. Gan, "Learning Physical Dynamics with Subequivariant Graph Neural Networks", in *Advances in Neural Information Processing Systems (NeurIPS)*, 2022. (**Acceptance Rate: 25.6%**)

[22] **J. Li***, H. Gang*, H. Ma, M. Tomizuka and C. Choi, "Important Object Identification with Semi-Supervised Learning for Autonomous Driving", in *IEEE Conference on Robotics and Automation (ICRA)*, 2022.

[21] R. Zhou, H. Gao, H. Zhou, M. Tomizuka, **J. Li*** and Z. Xu*, "Grouptron: Dynamic Multi-Scale Graph Convolutional Networks for Group-Aware Dense Crowd Forecasting", in *IEEE Conference on Robotics and Automation (ICRA)*, 2022.

[20] H. Ma, **J. Li**, R. Hosseini, M. Tomizuka and C. Choi, "Multi-Objective Diverse Human Motion Prediction with Knowledge Distillation", in *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR Oral)*, 2022. (**Acceptance Rate: 4.2%**)

[19] M. Toyungyernsub, E. Yel, **J. Li** and M. J. Kochenderfer, "Dynamics-Aware Spatiotemporal Occupancy Prediction in Urban Environments", in *IEEE/RSJ International Conference on Robotics and Systems (IROS)*, 2022.

[18] S. Malla, C. Choi, J. H. Choi, I. Dwivedi and **J. Li**, "DRAMA: Joint Risk Localization and Reasoning in Driving Scenarios", in *IEEE/CVF Winter Conference on Applications of Computer Vision (WACV)*, 2023. (**Acceptance Rate: 35.0%**)

[17] **J. Li**, F. Yang, H. Ma, S. Malla, M. Tomizuka and C. Choi, "RAIN: Reinforced Hybrid Attention Inference Network for Motion Forecasting", in *International Conference on Computer Vision (ICCV)*, 2021. (**Acceptance Rate: 25.9%**)

[16] H. Gang*, H. Girase, S. Malla, **J. Li**, A. Kanehara, K. Mangalam and C. Choi, "LOKI: Long Term and Key Intentions for Trajectory Prediction", in *International Conference on Computer Vision (ICCV)*, 2021. (**Acceptance Rate: 25.9%**)

[15] C. Choi, J. H. Choi, **J. Li** and S. Malla, "Shared Cross-Modal Trajectory Prediction for Autonomous Driving", in *Conference on Computer Vision and Pattern Recognition (CVPR Oral)*, 2021. (**Acceptance Rate: 4.2%**)

[14] X. Ma, **J. Li**, M. J. Kochenderfer, D. Isele and K. Fujimura, "Reinforcement Learning for Autonomous Driving with Latent State Inference and Spatial-Temporal Relationships", in *IEEE Conference on Robotics and Automation (ICRA)*, 2021.

[13] D. Cao*, **J. Li***, H. Ma and M. Tomizuka, "Spectral Temporal Graph Neural Network for Trajectory Prediction", in *IEEE Conference on Robotics and Automation (ICRA)*, 2021.
[12] H. Ma*, Y. Sun*, **J. Li**, and M. Tomizuka, "Multi-agent Driving Behavior Prediction across Different Scenarios with Self-supervised Domain Knowledge", in *IEEE Intelligent Transportation Systems Conference (ITSC)*, 2021.
[11] C. Gong, X. Zhou, Z. Li, **J. Li**, J. Gong and J. Zhou, "Orientation-Aware Planning for Parallel Task Execution of Omni-Directional Mobile Robot", in *IEEE/RSJ International Conference on Robotics and Systems (IROS)*, 2021.
[10] L. Wei, Z. Li, J. Gong, C. Gong, and **J. Li**, "Autonomous Driving Strategies at Intersections: Scenarios, State-of-the-Art, and Future Outlooks", in *IEEE Intelligent Transportation Systems Conference (ITSC)*, 2021.
[9] **J. Li***, F. Yang*, M. Tomizuka and C. Choi, "EvolveGraph: Multi-Agent Trajectory Prediction with Dynamic Relational Reasoning", in *Advances in Neural Information Processing Systems (NeurIPS)*, 2020. (**Acceptance Rate: 20.1%**)
[8] **J. Li**, H. Ma, and M. Tomizuka, "Conditional Generative Neural System for Probabilistic Trajectory Prediction", in *IEEE Conference on Robotics and Systems (IROS) (Oral)*, 2019.
[7] **J. Li***, H. Ma* and M. Tomizuka, "Interaction-aware Multi-agent Tracking and Probabilistic Behavior Prediction via Adversarial Learning", in *IEEE Conference on Robotics and Automation (ICRA)*, 2019.
[6] **J. Li**, H. Ma, W. Zhan and M. Tomizuka, "Coordination and Trajectory Prediction for Vehicle Interactions via Bayesian Generative Modeling", in *IEEE Intelligent Vehicles Symposium (IV)*, 2019.
[5] H. Ma, **J. Li**, W. Zhan and M. Tomizuka, "Wasserstein Generative Learning with Kinematic Constraints for Probabilistic Interactive Driving Behavior Prediction", in *IEEE Intelligent Vehicles Symposium (IV)*, 2019.
[4] **J. Li**, H. Ma, W. Zhan and M. Tomizuka, "Generic Probabilistic Interactive Situation Recognition and Prediction: From Virtual to Real", in *IEEE International Conference on Intelligent Transportation Systems (ITSC) (Oral)*, 2018.
[3] **J. Li**, W. Zhan and M. Tomizuka, "Generic Vehicle Tracking Framework Capable of Handling Occlusions Based on Modified Mixture Particle Filter", in *IEEE Intelligent Vehicles Symposium (IV) (Oral)*, 2018.
[2] W. Zhan, L. Sun, Y. Hu, **J. Li** and M. Tomizuka, "Towards a Fatality-Aware Benchmark of Probabilistic Reaction Prediction in Highly Interactive Driving Scenarios", in *IEEE International Conference on Intelligent Transportation Systems (ITSC) (Oral)*, 2018.
[1] W. Zhan, **J. Li**, Y. Hu and M. Tomizuka, "Safe and Feasible Motion Generation for Autonomous Driving via Constrained Policy Net", in *43rd Annual Conference of the IEEE Industrial Electronics Society*, 2017.

Workshop Publications

[3] V. Dax, **J. Li**, K. Leahy and M. J. Kochenderfer, "Graph Q-Learning for Combinatorial Optimization", in *NeurIPS 2022 Deep RL Workshop* and *NeurIPS 2022 Workshop on Graph Learning for Industrial Applications*.
[2] **J. Li***, F. Yang*, M. Tomizuka and C. Choi, "EvolveGraph: Multi-Agent Trajectory Prediction with Dynamic Relational Reasoning", in *NeurIPS Workshop on Machine Learning for Autonomous Driving*, 2020.
[1] **J. Li**, H. Ma, Z. Zhang and M. Tomizuka,"A^2-GNN: Interaction-Aware Trajectory Prediction via Graph Double-Attention Network", *RSS Workshop on Interaction and Decision-Making in Autonomous Driving*, 2020.

Patents

[8] **J. Li** and C. Choi, "Systems and Methods for Reinforced Hybrid Attention for Motion Forecasting", *US 2022/0156581*, 2022.
[7] **J. Li**, D. Isele and K. Fujimura, X. Ma and M. J. Kochenderfer, "Systems and methods for path planning with latent state inference and graphical relationships", *US 2022/0147051*, 2022.
[6] H. Ma, **J. Li** and C. Choi, "System and Method for Completing Continual Multi-Agent Trajectory Forecasting", *US 2022/0308581*, 2022.
[5] **J. Li** and C. Choi, "Systems and methods for heterogeneous multi-agent multi-modal trajectory prediction with evolving interaction graphs", *US 2021/0287531*, 2021.
[4] B. Wulfe, J. Ge and **J. Li**, "Systems and Methods for Hybrid Prediction Framework with Inductive Bias",

US 2021/0370990, 2021.

[3] **J. Li**, H. Gang, H. Ma and C. Choi, "System and Method for Important Object Identification with Semi-Supervised Learning in Autonomous Driving", *US patent*, in application.

[2] H. Ma, R. Hosseini, **J. Li** and C. Choi, "Diverse Human Motion Prediction", *US patent*, in application.

[1] H. Girase, H. Gang, S. Malla, **J. Li**, A. Kanehara and C. Choi, "System and Method for Providing Long Term and Key Intentions for Trajectory Prediction", *US patent*, in application.

Selected Press Coverage

- "LOKI: An intention dataset to train models for pedestrian and vehicle trajectory prediction", Tech Xplore
- "EvolveGraph: Dynamic Neural Relational Reasoning for Interacting Systems", Berkeley AI Research Blog

Invited Talks and Oral Presentations

- Towards Interactive Autonomy with Relational Reasoning
  - *Computer Forum at Stanford University* *2022*
  - *Department Seminar at University of Southern California* *2022*
  - *Department Seminar at National University of Singapore* *2022*
  - *Department Seminar at Arizona State University* *2022*
  - *Department Seminar at University of Minnesota, Twin Cities* *2022*
  - *BAIR Seminar at UC Berkeley* *2022*
  - *Safe AI Lab Seminar at Carnegie Mellon University* *2022*
  - *MediaBrain Lab Seminar at Shanghai Jiao Tong University* *2022*
- MAIR2: Multi-Agent Interaction and Relational Reasoning, *Waymo LLC* *2021*
- Multi-Agent Interaction and Relational Reasoning for Autonomous Driving, *IV 2021 Workshop* *2021*
- Relational Reasoning for Multi-Agent Systems
  - *BAIR/BDD Seminar at UC Berkeley* *2021*
  - *VASC Seminar at Carnegie Mellon University* *2021*
  - *Research Seminar at Honda Research Institute US* *2021*
  - *Intelligent Control Lab Seminar at Carnegie Mellon University* *2021*
- A^2-GNN: Interaction-Aware Trajectory Prediction, *RSS 2020 Workshop* *2020*
- Conditional Generative Neural System for Trajectory Prediction, *IROS 2019* *2019*
- Incorporating Relational Reasoning in Multi-agent Trajectory Prediction, *IROS 2019 Workshop* *2019*
- Inductive Bias in Behavior Prediction Models, *Intelligent Control Lab Seminar, CMU* *2019*
- Generative Models for Probabilistic Trajectory Prediction, *IV 2019 Workshop* *2019*
- Probabilistic Interactive Situation Recognition and Prediction, *ITSC 2018* *2018*
- Generic Vehicle Tracking Framework Capable of Handling Occlusions, *IV 2018* *2018*

Teaching Experience

Stanford University **Stanford, CA, USA**
Guest Lecture: Linear Constrained Optimization *04/2022*
Engineering Design Optimization (AA 222/CS 361)

Stanford University **Stanford, CA, USA**
Guest Lecture: Decision Making for Multi-Agent Systems *02/2022*
Advanced Topics in Sequential Decision Making (AA 229/CS 239)

University of California, Berkeley **Berkeley, CA, USA**
Course Assistant *01/2021 - 05/2021*
Optimization Models in Engineering (EECS 127/227A)

University of California, Berkeley — **Berkeley, CA, USA**
Course Assistant — *08/2020 - 01/2021*
Advanced Control Systems (ME C232/EECS C220A)

University of California, Berkeley — **Berkeley, CA, USA**
Course Assistant — *01/2017 - 05/2017*
Dynamic Systems and Feedback (ME 132)

Harbin Institute of Technology — **Harbin, China**
Teaching Assistant — *05/2016 - 07/2016*
Introduction to Circuits

Harbin Institute of Technology — **Harbin, China**
Teaching Assistant — *08/2014 - 01/2015*
Automatic Control Theory

Mentorship Experience

Ph.D. Students

- Bernard Lange (Stanford AA) — *2022 – Present*
- Alexandros Tzikas (Stanford AA) — *2022 – Present*
- Joshua Ott (Stanford AA) — *2022 – Present*
- Oriana Peltzer (Stanford ME) — *2022 – Present*
- Fadhil Ginting (Stanford AA) — *2022 – Present*
- Fan-Yun Sun (Stanford CS) — *2022 – Present*
- Kanghoon Lee (KAIST ISE) — *2022 – Present*
- Chuanbo Hua (KAIST ISE) — *2022 – Present*
- Victoria Dax (Stanford AA) — *2021 – Present*
- Maneekwan Toyungyernsub (Stanford ME) — *2021 – Present*
- Hengbo Ma (UC Berkeley ME) — *2020 – 2021*

Master Students

- Sean Roelofs (Stanford AA) — *2022 – Present*
- Kyle Beltran Hatch (Stanford CS) — *2022 – Present*
- Ethan Wang (Stanford CS) — *2022 – Present*
- Phil Chen (Stanford AA, now at Scale AI) — *2021 – 2022*
- Akshay Dharmavaram (CMU RI) — *2021 – 2022*
- Defu Cao (Master intern at UC Berkeley, now Ph.D. student at USC CS) — *2020 – 2021*

Undergraduate Students

- Nyle Wong (Stanford CS) — *2022 – Present*
- Matthew Jackson (Stanford CS LINXS Program) — *2022 – Present*
- Rui Zhou (UC Berkeley EECS, now Ph.D. student at MIT ME) — *2021 – Present*
- Jiaqi Han (Tsinghua University CS) — *2022 – Present*
- Yaofeng Sun (Undergraduate intern at UC Berkeley, now at Pony.ai) — *2020 – 2021*
- Fan Yang (Undergraduate intern at UC Berkeley, now M.S. student at CMU RI) — *2020 – 2021*
- Shefali Goel (Undergraduate at UC Berkeley EECS) — *2020 – 2021*
- Zhihao Zhang (Undergraduate intern at UC Berkeley, now Ph.D. student at CMU MLD) — *2019 – 2020*

Academic Services

Organizing Committee

- Lead-organizer, NeurIPS 2022 Workshop on Machine Learning for Autonomous Driving *2022*
- Co-organizer, NeurIPS 2022 Workshop on Progress and Challenges in Trustworthy Embodies AI *2022*
- Co-organizer, ICRA 2022 Workshop on Long-Term Human Motion Prediction *2022*
- Co-organizer, IV 2022 Workshop on Behavior Prediction and Generation in Autonomous Driving *2022*
- Co-organizer, ITSC 2022 Workshop on Behavior Prediction and Generation in Autonomous Driving *2022*
- Lead-organizer, ICCV 2021 Workshop on Multi-Agent Interaction and Relational Reasoning *2021*
- Co-organizer, NeurIPS 2021Workshop on Machine Learning for Autonomous Driving *2021*
- Co-organizer, IROS 2021 Workshop on Multi-Agent Interaction and Relational Reasoning *2021*
- Co-organizer, IV 2021 Workshop on Behavior Prediction and Generation in Autonomous Driving *2021*
- Co-organizer, ITSC 2021 Workshop on Social and Interactive Behavior Modelling *2021*
- Co-organizer, IV 2020 Workshop on Benchmarking Behavior Prediction in Autonomous Driving *2020*
- Co-organizer, IV 2019 Workshop on Prediction and Decision Making for Autonomous Driving *2019*

Program Committee

- Program Committee, RSS Pioneers Workshop *2023*
- Program Committee, ICLR 2022 Workshop on Gamification and Multiagent Solutions *2022*
- Program Committee, 4th Annual Learning for Dynamics & Control Conference (L4DC) *2022*
- Program Committee, ICLR 2022 Workshop on Gamification and Multiagent Solutions *2022*
- Program Committee, NeurIPS 2021 Workshop on Cooperative AI *2021*
- Program Committee, IJCAI 2021 Workshop on AI for Autonomous Driving *2021*
- Associate Editor, IEEE Intelligent Vehicles Symposium (IV) *2020 – 2022*

Journal Reviewer

- IEEE Transactions on Neural Networks and Learning Systems (T-NNLS) *2022 – Present*
- Transactions of Machine Learning Research *2022 – Present*
- IEEE Transactions of Industrial Informatics (T-II) *2022 – Present*
- Transportation Research Part C: Emerging Technologies *2022 – Present*
- Neurocomputing *2021 – Present*
- Signal Processing *2021 – Present*
- IEEE Intelligent Systems *2021 – Present*
- IEEE Robotics and Automation Letters (RA-L) *2021 – Present*
- IEEE Transactions on Vehicular Technology (T-VT) *2021 – Present*
- IEEE Transactions on Pattern Analysis and Machine Intelligence (T-PAMI) *2020 – Present*
- Neural Computing and Applications (NCAA) *2020 – Present*
- IEEE Transactions on Mechatronics (T-MECH) *2019 – Present*
- IEEE Transactions on Intelligent Vehicles (T-IV) *2018 – Present*
- IEEE Transactions on Intelligent Transportation Systems (T-ITS) *2017 – Present*
- IEEE Transactions on Industrial Electronics (T-IE) *2017 – Present*

Conference Reviewer

- AAAI Conference on Artificial Intelligence (AAAI) *2023*
- Conference on Robot Learning (CoRL) *2022*
- European Conference on Computer Vision (ECCV) *2022*
- IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) *2022*
- International Conference on Learning Representations (ICLR) *2022 – 2023*
- ACM International Conference on Information and Knowledge Management (CIKM) *2022*
- Advances in Neural Information Processing Systems (NeurIPS) *2020 – 2022*

- International Conference on Machine Learning (ICML) *2020 – 2022*
- International Conference on Computer Vision (ICCV) *2021*
- IEEE International Conference on Robotics and Automation (ICRA) *2019 – 2022*
- IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) *2019 – 2022*
- IEEE Intelligent Vehicles Symposium (IV) *2019 – 2022*
- IEEE Conference on Intelligent Transportation Systems (ITSC) *2019 – 2022*
- IEEE International Conference on Systems, Man, and Cybernetics (SMC) *2021*

Workshop Proposal Reviewer

- IEEE International Conference on Robotics and Automation (ICRA) *2021*

DEI Outreach Activities

- Mentor for NASA ULI Outreach Program, Stanford University 2022
- Mentor for CS LINXS Program, Stanford University 2022
- Mentor for Women in Computer Science (WiCS) Mentorship Program, Stanford University 2022
- Presenter for Cal Day, UC Berkeley 2018, 2019

Academic Society Affiliations

- Member of *American Society of Mechanical Engineers (ASME)* *2022 – Present*
- Member of *Institute of Electrical and Electronics Engineers (IEEE)* *2017 – Present*
- Member of *IEEE Intelligent Transportation Systems Society (ITSS)* *2017 – Present*
- Member of *IEEE Robotics and Automation Society (RAS)* *2017 – Present*