Jinning Li

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Education

University of California, Berkeley — **Berkeley, CA**
Ph.D. Candidate — *08/2019 – 05/2024(Expected)*
- Academic advisor: Prof. Masayoshi Tomizuka | Major: Control; Minor: Machine Learning, Optimization | GPA: 3.96/4.0

University of California, Berkeley — **Berkeley, CA**
M.S. in Engineering — *08/2019 – 12/2022*

Harbin Institute of Technology — **Harbin, China**
B.Eng. in Automation — *09/2015 – 07/2019*
- Academic advisor: Prof. Huijun Gao, and Prof. Weichao Sun | Major GPA: 4.0/4.0 | Ranking: 1/150

Skills

- Research: Deep Reinforcement Learning, Optimization, Machine Learning, Control
- Deep learning framework: Pytorch, Tensorflow, JAX, ONNX
- Programming: Python, C/C++, MATLAB

Work Experiences

Honda Research Institute USA, Inc. — **San Jose, CA**
Student Associate / Research Intern — *08/2023 – Present*
- Design computational model for human drivers, incorporating the behavior prediction of traffic agents
- Model the multi-modal interaction in dynamic scenes where agent needs to respond to their surroundings
- Develop interaction models using probabilistic models and optimize the agent behavior by reinforcement learning, behavior cloning, and model predictive control algorithms

Google LLC — **Sunnyvale, CA**
Software Engineer Intern, Machine Learning Infrastructure Team — *05/2023 – 08/2023*
- Designed and built a JAX-ONNX backend library: Jaxonnxruntime. Github: https://github.com/google/jaxonnxruntime
- Passed more than 700 unit tests from both ONNX backend test suites and customized scenarios including large language models
- Transformed the original Pytorch LLaMA model to JAX; Exported and served the transformed models by the JAX ecosystem
- Benchmarked the inference performance of the JAX models with different partition rules on GPUs and TPUs
- Customized the library based on the needs of users at Google

Google LLC — **Mountain View, CA**
Software Engineer Intern, Discover Ads Auction Team — *05/2022 – 08/2022*
- Designed and built an offline reinforcement learning infrastructure under Tensorflow for discover ads auction
- Trained deep NNs to optimize auction long term values from real-world data to achieve better advertiser/user value trade-off
- Conducted A/B testing of the trained algorithm on production traffic and polished the models accordingly
- Drove weekly meetings with the host teams and the research teams with effective communication
- Documented the design and implementation details for future iterations by the team

Academic Services

- **Co-chair** of Presentation Sessions at *2021 IEEE Conference on Robotics and Automation (ICRA)*
- **Graduate Student Instructor** of *UC Berkeley ME C232/EE C220A (Advanced Control Systems I)* Fall 2021
- **Academic Publication Reviewer** for *IEEE RA-L, IEEE T-SMC:Systems, CoRL, ICRA, IROS, NeurIPS workshops*

Publications

Please check my Google Scholar at https://scholar.google.com/citations?user=VbNwxKYAAAAJhl=en