Qinjie Lin

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EDUCATION

Department of Computer Science, Northwestern University 09/2020 - Present

- ✧ PhD in progress, Computer Science

  Advisor: Han Liu

Department of Computer Science, Northwestern University 09/2018 - 06/2020

- ✧ Master of Science, Computer Science

  Advisor: Han Liu GPA: **3.87/4.0**

Department of Computer Science and Engineer, South China University of Technology 09/2014 - 06/2018

- ✧ Bachelor of Engineering, Computer Science and Technology

  Advisor: Sheng Bi GPA: **3.74/4.0** Ranking: Top10%

SELECTED EXPERIENCE

AI Research Scientist Internship, Meta Reality Lab 06/2023 - 10/2023

- ✧ Developing AI planning methods that can support inferring user input and interaction intent, to continually recommend actions which best serve the user in a given context.
- ✧ Devising a hierarchical planning approach capable of planning for high-level tasks by decomposing the high-level tasks to generate a sequence of low-level tasks which can be executed by an agent.

Machine Learning Research Intern, Zebra Tech 09/2021 - 12/2021

- ✧ Developing and applying large language model and reinforcement learning techniques in innovative end-to-end system prototypes to solve real-world problems.

Robotics SLAM Intern, Inmotion Robotics 05/2018 - 08/2018

- ✧ Developing robotic autonomous localizing and mapping algorithm(SLAM) for mobile robot.

PUBLICATIONS

- ✧ **EMS®: A Massive Computational Experiment Management System towards Data-driven Robotics**

  Qinjie Lin, *Guo Ye, Han Liu*

  2023 IEEE International Conference on Robotics and Automation (ICRA)

- ✧ **Learning to Plan in High Dimensions via Neural Exploration-Exploitation Trees**

  Binghong Chen, Bo Dai, ***Qinjie Lin****, Guo Ye, Han Liu, Le Song*

  Published on The 2020 International Conference on Learning Representations. (ICLR)

- ✧ **Collision-free Navigation of Human-centered Robots via Markov Games**

  Guo Ye∗*,* ***Qinjie Lin***∗*, Tzung-Han Juang, Han Liu*

  Published on the 2020 International Conference on Robotics and Automation. (ICRA)

- ✧ **RoboFlow: a Data-centric Workflow Management System for Developing AI-enhanced Robots**

  Qinjie Lin*, Guo Ye*, *Jiayi Wang, Han Liu*

  5th Annual Conference on Robot Learning, Blue Sky Submission Track. (CoRL)

- ✧ **Switch Trajectory Transformer with Distributional Value Approximation for Multi-Task Reinforcement Learning**

  Qinjie Lin*, Han Liu, Biswa Sengupta*

  Submission to AAAI2024

- **Compiling Temporal Hierarchical Task Planning into Integer Linear Programming**

  ***Qinjie Lin**, Satish Kumar, Rohan Chitnis, Ruta Desai, Han Liu, Nitin Kamra*

  Submission to ICAPS2024

- **ChatEMS: An AI-Enabled Experiment Management System for Efficiently Scaling Computational Experiments Using Natural Language**

  ***Qinjie Lin**, Han Liu*

  Submission to MLSys2024

- **RobLAX: A Differentiable Robotics Framework for Physics Augmented Reinforcement Learning**

  Guo Ye, **Qinjie Lin***, Tim Tsz-Kit Lau, Wanxin Jin, Haozheng Luo, Zhuoran Yang, Cheng Zhou, Zhaoran Wang, Han Liu*

  Working on submission to Arxiv

- **Indoor Mapping Using GMapping on Embedded System**

  ***Qinjie Lin**, Zhaowu Ke, Sheng Bi*,Sirui Xu, Yuhong Liang, Fating Hong, Liqian Feng*

  Published on IEEE International Conference on Robotics and Biomimetics. (ROBIO)

- **Optimization of Robot Path Planning Parameters Based on Genetic Algorithm**

  *Yuhong Liang, Fating Hong, **Qinjie Lin**, Liqian Feng, Sheng Bi*

  Published on IEEE International Conference on Real-time Computing and Robotics. (RCRA)

- **A Global Localization System for Mobile Robot Using LIDAR Sensor**

  Liqian Feng, Sheng Bi, Min Dong, Fating Hong, Yuhong Liang, **Qinjie Lin** and Yunda Liu*

  Published on the 9th IEEE International Conference on CYBER Technology (IEEE-CYBER)

COMPUTER SKILLS

- Programming languages: Python, Matlab, C++, C, R, Java, Android,
- Skills: Ray, Jax, ROS, Docker, Kubernetes, Gazebo, Pybullet, OpenRave, V-Rep, Unity, PyTorch