FEIYANG WU

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EDUCATION

Georgia Institute of Technology *Atlanta, US*
Doctor of Philosophy in Machine Learning *Aug. 2023 - (expected) 2027*
Master of Science in Computer Science *Aug. 2021 - Aug. 2023*

Chinese University of Hong Kong, Shenzhen *Shenzhen, China*
Bachelor of Engineering in Computer Science and Engineering *Sept. 2015 - June. 2020*

PUBLICATIONS

Preprints

[1] **Feiyang Wu**, Ye Zhao and Anqi Wu. "Distributional Inverse Reinforcement Learning". 2025.

Journal Articles

[2] Tianjiao Li, **Feiyang Wu** and Guanghui Lan. "Stochastic First-Order Methods for Average-Reward Markov Decision Processes". In: Mathematics of Operations Research (MOR) (2025).

[3] **Feiyang Wu**, Xavier Nal, Jaehwi Jang, Wei Zhu, Zhaoyuan Gu, Anqi Wu and Ye Zhao. "Learn to teach: Sample-efficient privileged learning for humanoid locomotion over real-world uneven terrain". In: IEEE Robotics and Automation Letters (2025).

[4] Dong Du, Xiaoguang Han, Hongbo Fu, **Feiyang Wu**, Yizhou Yu, Shuguang Cui and Ligang Liu. "SAniHead: Sketching Animal-like 3D Character Heads Using a View-Surface Collaborative Mesh Generative Network". In: IEEE Transactions on Visualization and Computer Graphics (TVCG) (2020).

Conference Papers

[5] Jaehwi Jang, Zhuoheng Wang, Ziyi Zhou, **Feiyang Wu** and Ye Zhao. "SEEC: Stable End-Effector Control with Model-Enhanced Residual Learning for Humanoid Loco-Manipulation". In: Proceedings of the IEEE International Conference on Robotics and Automation (ICRA). 2026.

[6] Junnosuke Kamohara, **Feiyang Wu**, Chinmayee Wamorkar, Seth Hutchinson and Ye Zhao. "RL-augmented Adaptive Model Predictive Control for Bipedal Locomotion over Challenging Terrain". In: Proceedings of the IEEE International Conference on Robotics and Automation (ICRA). 2026.

[7] Jingyang Ke, **Feiyang Wu** and Anqi Wu. "Inverse Reinforcement Learning with Switching Rewards and History Dependency for Characterizing Animal Behaviors". In: Proceedings of the International Conference on Machine Learning (ICML). 2025.

[8] **Feiyang Wu**, Zhaoyuan Gu, Hanran Wu, Anqi Wu and Ye Zhao. "Infer and Adapt: Bipedal Locomotion Reward Learning from Demonstrations via Inverse Reinforcement Learning". In: Proceedings of the IEEE International Conference on Robotics and Automation (ICRA). 2024.

[9] **Feiyang Wu**, Jingyang Ke and Anqi Wu. "Inverse Reinforcement Learning with the Average Reward Criterion". In: Advances in Neural Information Processing Systems (Neurips). 2023.

RESEARCH AND WORKING EXPERIENCE

Georgia Tech Research Institute *June 2024 - Aug 2024*
Research Intern

- Project aims to augment training data in Isaac Sim to reality for robotics arms (UR5). Work with Isaac Lab for constructing a tele-operation platform on collecting data in various crafted scenes.
- Collect data and augment with GenAI and train Diffusion Policies (DP3 and DP). Connect Isaac Lab with ROS2 for hardware demonstration.

Research Assistant *Oct. 2021 - June 2022*
H. Milton Stewart School of Industrial and Systems Engineering, Geogia Tech
- Work with Dr. Guanghui Lan in theoretical Reinforcement Learning.
- Develop theories and algorithms solving average-reward Reinforcement Learning problems using policy mirror descent. Analyze convergence properties under various assumptions.

Linear Programming Solver developer *Sept. 2020 - Aug. 2021*
Shenzhen Research Institute of Big Data, CUHK Shenzhen
- Lead developer for large scale general purpose linear programming optimization solvers.
- Implement the primal-dual simplex (sifting), direct solve (Cholesky decomposition), regularization and perturbation techniques in interior point methods.
- Push computational performance comparable to best commercial solver.

College of Computing, Georgia Tech *June 2022 - May 2023*
Graduate Teaching Assistant, CS 6601 Artificial Intelligence
- Hold weekly office hour sessions and various tutorial sessions; design exam questions and provide solution manual; improve and polish assignments and provide solution manual.

Didi Chuxing, Beijing *Jan. 2019 - June 2019*
Research Intern
- On-site internship in Visual Computing Group. Didi's on-device AR navigation system helps users find route for pick-up locations through visual SLAM (cloud backend).
- Develop and test AR navigation system. Collect and analyse user data.
- Develop machine learning algorithms to improve accuracy of the navigation system with Gradient Boosting decision trees, LSTM sequence models, and Support Vector Machines.

Sino Smart, Shenzhen *May 2018 - July 2018*
Research Intern
- On-site internship. Conduct research on computer vision problems for company's software.
- Develop algorithms used in an Augmented Reality Head-Up Display (AR HUD) product, manufactured and used by Foryou Multimedia Electronics Co.

SKILLS

Programming Languages	C/C++, Python, Java, Objective-C, Javascript, HTML/CSS, C#
Software & Tools	LaTeX, MATLAB, Maya, MeshLab, MS Office
Frameworks	PyTorch, TensorFlow, OpenCV, SciKit-Learn, Armadillo