Zibin Dong

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⭘ GitHub Profile

College of Intelligence and Computing, Tianjin University

EDUCATION

• **School of Mechanical Engineering and Automation, Harbin Institution of Technology (Shenzhen)**   *2019-2023*
  Bachelor's Degree, Automation

• **College of Intelligence and Computing, Tianjin University**   *2023-now*
  Master's Degree, Computer Science

• **Intern at Huawei Noah's Ark Lab**   *2024-now*

RESEARCH INTERESTS

My research interests primarily focus on developing **general embodied agents**. To accomplish this goal, my current research encompasses Embodied AI: **Reinforcement Learning, Generative Models, Robotics, Computer Vision, and Large Foundation Models.** Trying to leverage advanced deep learning techniques to solve complex real robot applications and generalize to unseen scenarios.

RESEARCH PUBLICATIONS

- **Zibin Dong**, Yifu Yuan, Jianye Hao, Fei Ni, Yi Ma, Pengyi Li, Yan Zheng. "CleanDiffuser: An Easy-to-use Modularized Library for Diffusion Models in Decision Making." *The Thirty-eight Conference on Neural Information Processing Systems Datasets and Benchmarks Track, NeurIPS. 2024.*

- **Zibin Dong**, Jianye Hao, Yifu Yuan, Fei Ni, Yitian Wang, Pengyi Li, Yan Zheng. "DiffuserLite: Towards Real-time Diffusion Planning." *The Thirty-eighth Annual Conference on Neural Information Processing Systems, NeurIPS. 2024.*

- **Zibin Dong**, Yifu Yuan, Jianye Hao, Fei Ni, Yao Mu, Yan Zheng, Yujing Hu, Tangjie Lv, Changjie Fan, Zhipeng Hu. "AlignDiff: Aligning Diverse Human Preferences via Behavior-Customisable Diffusion Model." *The Twelfth International Conference on Learning Representations, ICLR. 2024.*

- Fei Ni, Jianye Hao, Shiguang Wu, Longxin Kou, Yifu Yuan, **Zibin Dong**, Jinyi Liu, MingZhi Li, Yan Zheng, Yuzheng Zhuang. "PERIA: Perceive, Reason, Imagine, Act via Holistic Language and Vision Planning for Manipulation." *The Thirty-eighth Annual Conference on Neural Information Processing Systems, NeurIPS. 2024.*

- Longxin Kou, Fei Ni, Yan Zheng, Jinyi Liu, Yifu Yuan, **Zibin Dong**, Jianye Hao. "KISA: A Unified Keyframe Identifier and Skill Annotator for Long-Horizon Robotics Demonstrations." *Forty-first International Conference on Machine Learning, ICML. 2024.*

- Yifu Yuan, Jianye Hao, Yi Ma, **Zibin Dong**, Hebin Liang, Jinyi Liu, Zhixin Feng, Kai Zhao, Yan Zheng. "Uni-RLHF: Universal Platform and Benchmark Suite for Reinforcement Learning with Diverse Human Feedback." *The Twelfth International Conference on Learning Representations, ICLR. 2024.*

- Hebin Liang, **Zibin Dong**, Yi Ma, Xiaotian Hao, Yan Zheng, Jianye Hao. "A Hierarchical Imitation Learning-based Decision Framework for Autonomous Driving." *Proceedings of the 32nd ACM International Conference on Information and Knowledge Management, CIKM. 2023.*

- Lei Shi, Jianye Hao, Hongyao Tang, **Zibin Dong**, Yan Zheng. "Self-Supervised Bisimulation Action Chunk Representation for Efficient RL." *Neurips Safe Generative AI Workshop 2024, NeurIPS workshop. 2024.*

- Haoyuan Sun, Zihao Wu, Bo Xia, Pu Chang, **Zibin Dong**, Yifu Yuan, Yongzhe Chang, Xueqian Wang. "A Method on Searching Better Activation Functions." *NeurIPS 2024 Workshop on Scientific Methods for Understanding Deep Learning, NeurIPS workshop. 2024.*

- Yifu Yuan, Zhenrui Zheng, **Zibin Dong**, Jianye Hao. "MODULI: Unlocking Preference Generalization via Diffusion Models for Offline Multi-Objective Reinforcement Learning." *arXiv preprint arXiv:2408.15501. 2024.*

PROJECTS

• **CleanDiffuser** (**Github Link**)   *342 Stars ⭐ / 28 Forks 👏 / Paper with Code Trending 🏆*