Isadora White

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Education

University of California, San Diego

2024-09 -

PhD in Computer Science and Engineering

University of California, Berkeley

Honors B.A. in Computer Science and Applied Math

2019-09 to 2024-05 **GPA: 3.95/4.0**

Publications & Preprints

BugPilot: Complex Bug Generation For Efficient Training of SWE Agents

In Submission

Atharv Sonwane*, Isadora White* Hyunji Lee, Matheus Pereira, Lucas Caccia, Minseon Kim, Zhengyan Shi, Chinmay Singh, Alessandro Sordoni, Marc-Alexandre Cote, Xingdi Yuan

Gistify: Codebase-Level Understanding via Runtime Execution

In Submission

Hyunji Lee, Minseon Kim, Chinmay Singh, Matheus Pereira, Atharv Sonwane, Isadora White, Elias Stengel-Eskin, Mohit Bansal, Zhengyan Shi, Alessandro Sordoni, Marc-Alexandre Côté, Xingdi Yuan, Lucas Caccia

Collaborating Action by Action: Multi-agent LLM Framework for Embodied Reasoning

4.3k stars on GitHub!

Isadora White*, Kolby Nottingham*, Ayush Maniar, Max Robinson, Mehul Maheshwari, Hansen Lillemark, Lianhui Qin, Prithviraj Ammanabrolu

LMRL Gym: Benchmarks for Multi-Turn Reinforcement Learning with Language Models

ICML 2025

Marwa Abdulhai, Isadora White, Charlie Victor Snell, Charles Sun, Joey Hong, Yuexiang Zhai, Kelvin Xu, Sergey Levine

Communicate to Play: Pragmatic Reasoning for Efficient Cross-Cultural Communication

EMNLP 2024 Findings

Isadora White, Sashrika Pandey, Michelle Pan

Experience

Research Scientist Intern, Microsoft Research

2025-06

- Trained a state-of-the-art SWE agent for 32B and 14B parameters on SWE-Bench-Verified
- Developed a training pipeline for training SWE agents with RL

Research Assistant, UC San Diego

2024-09

- Building better agents for Scientific tasks such as weather forecasting
- Designing better, more efficient algorithms for training agents with reinforcement learning
- Leverage AI agents to solve problems in computer security, such as preventing scams and misinformation

Research Assistant, Berkeley AI Research, advised by Prof. Sergey Levine

2023-02 - 2024-07

- Designed text-based chess and maze benchmark tasks to test complex strategic reasoning in language models and RL algorithms
- Evaluated reinforcement learning with language baselines and tuned hyperparameters for efficiency and stability
- Designed LLM agents to play the game of codenames and developed a technique RSA+C3 to allow agents to adapt to players of different cultures in real-time

Software Development Intern, AWS AI: Lookout for Metrics

2021-08 - 2021-12

- Detected outliers in time series data using the unsupervised learning technique Random Cut Forest (RCF)
- Developed AWS infrastructure to build a pipeline for outlier detection on new use cases

Machine Learning Intern, Informatica

2021-06 - 2021-08

With Prof. AnHai Doan

- Implemented querying strategy for selection of unlabeled examples to label for active learning
- Improved F1 score by over 5% on all datasets for business term glossary association

Skills

ML: PyTorch, JAX, DeepSpeed, RLHF, Reinforcement Learning, language model training, multi-agent systems

Systems: distributed training, vLLM, Docker, AWS

Languages: Python, C, Java, JavaScript