Isadora White

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Education

University of California, San Diego   2024 -
PhD in Computer Science and Engineering advised by Lianhui Qin and Prithviraj Ammanabrolu

University of California, Berkeley   2024
Honors B.A. in Computer Science and Applied Math   *GPA: 3.95/4.0*

Awards and Honors

NSF Graduate Research Fellowship Honorable Mention   2024
Percy Lionel Davis Award for Excellence in Scholarship in Mathematics   2024
EECS Honors Program at Berkeley, Berkeley Dean's List (top 10% of my class)   2024
Phi Beta Kappa Member   2024
DAAD RISE Germany Scholarship   2022

Papers

Communicate to Play: Pragmatic Reasoning for Efficient Cross-Cultural Communication *EMNLP 2024 Findings*   Aug. 2024
Isadora White, Sashrika Pandey, Michelle Pan

- Designed LLM agents to play the game of codenames and to reflect culturally induced behaviors
- Developed a technique RSA+C3 to allow agents to adapt to players of different cultures in real-time

LMRL Gym: Benchmarks for Multi-Turn Reinforcement Learning with Language Models *GMDM@ICLR 2024*   Nov. 2023
Marwa Abdulhai, **Isadora White**, Charlie Victor Snell, Charles Sun, Joey Hong, Yuexiang Zhai, Kelvin Xu, Sergey Levine
In Submission as a Conference Paper

- 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

Work & Research Experience

Research Assistant, UC San Diego, *advised by Prof. Lianhui Qin and Prof. Prithviraj Ammanabrolu*   Sept. 2024 -

- Designing environment and tasks for embodied multi-agent collaborative reasoning and planning
- Developing methods for improved common sense reasoning under constraints and in collaborative situations

Research Assistant, Berkeley AI Research, *advised by Prof. Sergey Levine*   2023 - 2024

- Designing environment and tasks for embodied multi-agent collaborative reasoning and planning
- Developing methods for improved common sense reasoning under constraints and in collaborative situations

Research Assistant, DAAD RISE Germany, University of Muenster *Advised by Prof. Joerg Becker*   May 2022 - Sep. 2022

- Compared efficacy of fine-tuned single language and multi-language BERT and T5 language models for comment moderation
- Identified and mitigated biases in the predictions of the automated content moderation system using mechanistic interpretability

Software Development Intern, AWS AI: Lookout for Metrics   Aug. 2021 - Dec. 2021

- 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   Jun. 2021 - Aug. 2021
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

Service & Mentoring

Reviewer: EMNLP 2024, Queer in AI Workshop @ ICLR and NeurIPS, Wordplay @ ACL 2024
Organizing: Queer in AI Workshop @ NeurIPS, Association of Women in EE&CS @ Berkeley
Mentees: Ayush Maniar (Masters @ UCSD), Lai Jiang (Undergrad @ UCSD)

Skills
Math: linear algebra, probability theory, abstract algebra, real analysis, complex analysis, numerical analysis
Languages: German (fluent), Spanish (proficient) Programming: C, Java, Python; Jax and PyTorch