Bryan Brandt

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PROFILE

A passionate recent graduate in the field of computer science with a focus on artificial intelligence, I possess a strong drive for continuous learning and a commitment to applying techniques for solving unique challenges. With a Master's degree in computer science specializing in Artificial Intelligence, I bring enthusiasm and results-driven focus. Proficient in harnessing cutting-edge technologies and implementing advanced machine learning algorithms, I have a proven track record of collaborating on projects and utilizing analytical and problem-solving skills. My particular interest lies in deep learning, and I am excited about contributing to innovative AI projects.

EDUCATION

University of Wisconsin Whitewater, Whitewater, WI   Completed: 2023
M.S. Computer Science
Thesis: Replicating Human Bias Through Synthetic Data Generation Using Deep Learning

University of South Florida, Tampa, FL   Completed: 2014
M.S. Applied Behavior Analysis
Thesis: An Examination of Electrodermal Activity During Tic Suppression in Adults

University of Wisconsin-Milwaukee, Milwaukee, WI   Completed: 2011
B.A. Psychology
Thesis: Comparing the Effects of Response Cost and DRO Contingencies on Tic Suppression

EXPERIENCE

U.S. Naval Research Laboratory   Washington, D.C.
Contractor/Volunteer/Intern   May 2022 - December 2023

- Interned at the U.S. Naval Research Laboratory as part of Naval Research Enterprise Intern Program.
- Performed independent literature reviews on current machine learning methodologies for synthetic data generation and tested and evaluated the use of auto-regressive generators, generative adversarial networks, and reinforcement learning agents.
- Designed an algorithm that incorporates reinforcement learning and imitation learning to synthetically generate discrete decision-making data using sparse training data.
- Contracted to expand the algorithm to incorporate human participants from the University of Wisconsin Whitewater within an expanded state space so that generalization of methodologies could be evaluated.
- Worked as part of a research team on a government research grant.

Artificial Intelligence Research Lab   Whitewater, WI
Researcher   August 2022 – May 2023

- Conducted research in the field of artificial intelligence within a university research group setting.
- Created and executed a study examining the semantics of human language.
- Advised other research projects on machine learning methodology as part of an interdisciplinary setting.
- Pursued a similarity metric design for use with medical diagnostic codes utilizing graph networks.

University of Wisconsin Whitewater   Whitewater, WI
Graduate Assistant   Jan 2022 - May 2022

- Taught Intermediate Java lab course.
- Created lesson plans for lab projects.
- Graded projects completed by undergraduate students.

PUBLICATIONS

Brandt, Bryan, Dasgupta, Prithviraj, "Synthetically generating human-like data for sequential decision-making tasks via reward-shaped imitation learning," in Synthetic Data for Artificial Intelligence and Machine Learning: Tools, Techniques, and Applications, Proceedings of SPIE Defense + Commercial Sensing, Vol. 12529, Article 125290I, Orlando, Florida, United States, 2023. https://doi.org/10.1117/12.2664109

SKILLS

- **Relevant Coursework:** Machine Learning, Deep Learning, Software Engineering
- **Programming:** Python, Java
- **Software Libraries:** Pandas, NumPy, AI Open Gym, Stable Baselines, networkX