Jesse Silverberg

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jessesilverberg

Education

Case Western Reserve University: M.S. Computer Science *2023 – Present*
GPA: 4.0. Expected Graduation: June 2025

Case Western Reserve University: B.S. Computer Science *2021 – Present*
GPA: 4.0. Expected Graduation: June 2025

Selected Work Experience

Research Intern: Johns Hopkins University Applied Physics Laboratory *2022 – Present*
Developed novel hierarchical reinforcement learning algorithms for meta-learning and multi-task learning. A separate project focused on improving sample efficiency for safe reinforcement learning algorithms. Other projects involved assured autonomy for mobile robots, RL for power grid control and safety, and creating embodied robotic agents with LLMs. Principal Investigator: Jared Markowitz

Data Science Associate: When We All Vote/Civic Nation *2020 – 2021*
Also **consultant (2021–2022)**. Designed and analyzed experiments to measure efficacy of voter registration efforts. Built predictive models to inform targeting of mail and digital advertising. Supervisor: Mohammed Maraqa

Research Assistant: University of Maryland Institute for Advanced Computer Studies *2019*
Worked in the Artificial Intelligence and Metacognition lab on designing robotic systems with the ability to reason about and correct their own behavior. Principal Investigator: Donald Perlis

Teaching Experience

Teaching Assistant: Natural Language Processing *2024*
Developed course materials and graded assignments. Instructor: Soumya Ray

Teaching Assistant: Intro to AI for Industry Professionals *2023*
Developed course materials and taught classes. Instructor: Vipin Chaudhary

Teaching Assistant: Sequential Decision Making *2023*
Developed course materials and graded assignments. Instructor: Soumya Ray

Relevant Coursework

Mathematics: Information Theory, High Dimensional Probability, Numerical Analysis, Linear Algebra, Discrete Math, Complex Analysis, Multivariable Calculus, Differential Equations, Logic

Sciences: Artificial Intelligence, Modeling and Simulation, Computer Graphics, Algorithms, Data Structures, Mathematical Physics, Quantum Physics

Programming Experience

Languages: Python, C++, JavaScript, Java, R, SQL

Awards

- Robert J. Herbold Fellowship
- MathWorks Math Modeling Challenge, Technical Computing Winner
- U.S. Physics Olympiad Qualifier