

Daniel Masamba

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OBJECTIVE

As a fast learner and diligent professional, I am eager to contribute my unwavering dedication and enthusiasm to a dynamic team. I am committed to expanding my skillset and accumulating valuable experience while actively contributing to the success of the team and organization.

EDUCATION

The University of Texas Rio Grande Valley Edinburg, TX
PhD in Computer Science with Interdisciplinary Applications, anticipated graduation Fall 2029 4.0 Current GPA

The University of Texas Rio Grande Valley Edinburg, TX
Bachelor of Science in Computer Science, May 2024 4.0 GPA

- Honors: UTRGV President's Honor List Spring 2021 – Spring 2024
- 2024 College of Engineering & Computer Science Outstanding Undergraduate Student

Relevant Coursework: Computer Science I & II, Data Structures and Algorithms, Intro to Deep Learning, Intro to Reinforcement Learning, Intro to Data Science, Software Engineering I, Calculus I & II, Linear Algebra, Probabilities and Statistics, Web Development, Object Oriented Programming in Java

EXPERIENCE

Machine Intelligence Research Assistant, University of Texas Rio Grande Valley April 2022 – Present

- Assist in research on various topics of machine intelligence such as Reinforcement Learning, Machine Learning, and Bioinformatics

Multiple Autonomous Robot Systems Research Assistant, UTRGV April 2023 – June 2024

- Assist in research on Swarm Robotics intelligence more specifically Scalable Foraging Swarm Robotics

Math Tutor, University of Texas Rio Grande Valley June 2023 – July 2024

- Assist students improve their knowledge in different Math topics such as College Algebra, Pre-Calculus, Calculus I, Calculus II, Linear Algebra

Data Analyst Intern, University of Texas Rio Grande Valley September 2021 – May 2022

- Participate in conducting high-quality, timely research to assess program operations and their impact on improving Hispanic students' retention and graduation rates at a Hispanic Serving Institution

VOLUNTEER EXPERIENCE

Helper, Catholic Charities RGV (Humanitarian Center) February 2018 – June 2021
Young Adults Leader, Palm Valley Church August 2021 - Present

SKILLS

Languages: English: Fluent, French: Fluent, Lingala: Fluent, Spanish: Basic

Programming Languages: C++: Proficient, Python: Proficient, HTML/CSS: Intermediate, Java: Basic, Javascript: Basic

Projects:

- Trained an AI agent to successfully navigate various environments, including Frozen Lake, Cart Pole, Atari Breakout, and Box2D Car Racing, using different Reinforcement Learning algorithms such as PPO, A2C, and DQN.
- Developed a volleyball game with Multi-Agent Reinforcement Learning using Unity ML-Agents and C#
- Implemented a Reinforcement Learning solution on e-puck robot for locating and retrieving randomly spawned targets in an unknown environment on Webots with Python
- Employed diverse control strategies for cooperative multi-robot tasks using multi-agent reinforcement learning on PyBullet in conjunction with Gymnasium
- Currently working on developing a Multi-Agent Reinforcement Learning algorithm with Transformer