

University of Maryland Eastern Shore Department of Engineering ENCE 452

Project 1

- 1) Set up a machine learning programming environment on your computer (e.g., using Python, Anaconda, or Google Colab).
- 2) Locate a sample reinforcement learning program. You can find examples in:
 - OpenAI Gym (commonly used RL environment)
 - Stable-Baselines3 (a popular RL library with tutorials and sample code)
 - PyTorch or TensorFlow tutorials on reinforcement learning
 - GitHub repositories (search for "reinforcement learning examples" or "RL tutorials")
- 3) Update your programming environment as needed to install the required libraries and run the sample program on your computer.
- 4) Carefully read through the sample code and learn the meaning of each part (e.g., environment setup, agent definition, training loop, evaluation).
- 4) Summarize what you learned from this process—for example, how to install and configure the machine learning environment, the specific techniques used in the reinforcement learning example, and the results you observed.