

Project Idea (Designing Intelligent Agents)

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The initial idea for this project will be using the robotics environments from OpenAIGym - <https://gym.openai.com/envs/#robotics>, specifically the HandManipulate(*) environments. The question I'd like to ask is: **If a genetic algorithm is trained on HandManipulateBlock, can we transfer the learning to a different HandManipulate(*) environment and still have a useful agent?** I think this would be a useful task as if training a robotic hand to do 1 task improves it's usefulness in other tasks we could train generic robot hands that could do lot's of useful tasks in real-life very quickly and easily.

I'd implement some code to create a genetic algorithm, run that code on HandManipulateBlock to get a measure of average performance - hopefully quite high and then run the same code on the other two environments to see how the system fairs.