

Deep Learning Robotic Tasks

Use the latest Deep Learning techniques to guide a robot towards grasping objects a large grasping dataset, technology which could eventually be used for a robotic surgical or recovery room assistant.

Students Will

Use the latest machine learning techniques to develop control software which predicts successful object grasps, and demonstrate the accuracy of your motion predictor on a large robotic grasping dataset.

Deliverables

Code and a report of test results.

Skills Required

Basics of Development, Robot Kinematics, Systems Programming, and Machine Learning

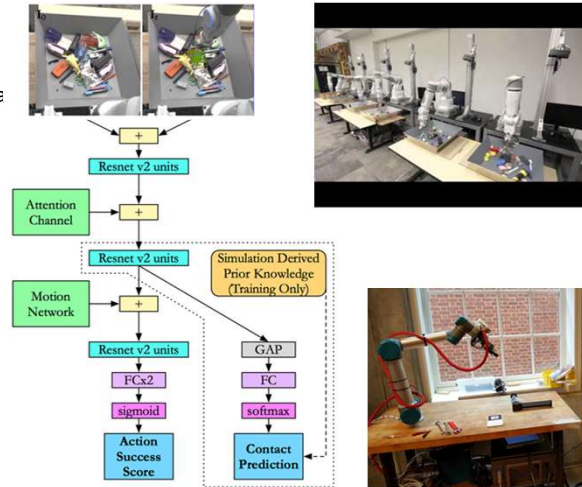
Opportunity to Learn

TensorFlow, Keras, and Deep Reinforcement Learning

Group Size: 1-3

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Faculty Mentor: Greg Hager hager@cs.jhu.edu



Reference Paper: <https://arxiv.org/pdf/1603.02199v4.pdf>