Specialization Project

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Abstract

The following proposal describes the **Specialization Project (IE505718)** structure that would be required for the topic **Affordance Learning for Interaction Design**.

1 Course code and Name

IE505718 Specialization Project

2 Topic

Affordance Learning for Interaction Design

3 Course content

1. Simulation Software

   (a) An overview of different simulation software
   (b) Detailed analysis of Nvidia Isaac Sim

4 Learning outcome

1. Knowledge

   (a) Pros and Cons of different simulation software
   (b) Technical nuance of Nvidia Isaac Sim
   (c) Algorithmic changes needed to incorporate existing RL implementations in Isaac Sim

2. Skill

   (a) Ability to setup and replicate different experimental environments from literature

    (b) Ability to implement and create new experimental environments

3. General Competence

    (a) Should be able to understand and implement an affordance learning sandbox prototype

5 Evaluation

1. A working prototype of affordance learning sandbox with documentation

6 References

1. Learning To Walk in Minutes by Rudin et al and Nvidia.

2. Graphics and Simulation Courses by Nvidia