

colabs



COORDINATOR	Prof. José Santos-Victor
PHD/PÓS-DOC/...	Dr. Plinio Moreno López
INSTITUTE/LAB	Institute for Systems and Robotics
PROJECT TITLE	Action-conditioned video prediction from robotic data
PROJECT DESCRIPTION	Predicting the future video frames that a robot will observe while it performs a given action on a given object (from a collection of available objects) allows a robot to reason on the effects of its actions, and to plan its actions accordingly, so as to reach its goals. We are interested here in the prediction of video frames, based on the video frames previously seen, and knowledge about the executed action.
WORK FIELD/CONCEPTS	Deep learning, implementation of algorithms
NUMBER OF VACANCIES	1
STUDENT PROFILE	Responsible
REQUIRED SKILLS	Python, Reading scientific reports, Strong knowledge of linear algebra, English proficiency
OBJECTIVES	Review and implement state-of-the-art models based on publicly available datasets. Evaluate advantages and disadvantages of the existing models in the literature.
NECESSARY EQUIPMENT	Laptop
DURATION	16 weeks Start: --- Finish: ---
RECOMMENDED SCHEDULE	11:00AM-13:00PM Tuesdays 11:00AM-13:00PM Fridays