IEEE IEEE-IST Student Branch | EMBS

colabs

COORDINATOR	Dr. Plinio Moreno
PHD/PÓS-DOC/…	Ph.D. candidate Rui Figueiredo
INSTITUTE/LAB	Institute for Systems and Robotics
PROJECT TITLE	Learning to search for objects in foveal images
PROJECT DESCRIPTION	A recurrent neural network (RNN) will learn where to look from the sequence of gaze points from humans, during the task of searching for an object belonging to a certain category. The input of the RNN will be foveated images that emulate the way human's retina works
WORK FIELD/CONCEPTS	Image processing, Neural Networks, Recurrent neural networks
NUMBER OF VACANCIES	2
STUDENT PROFILE	Organized, sociable, responsible.
REQUIRED SKILLS	Basic knowledge of programming, Python programming is a plus. Reading scientific reports.
OBJECTIVES	Learn to use Recurrent Neural Networks in Keras. Implement a recurrent neural network that uses top-down saliency to decide where to look, using as input foveated images.
NECESSARY EQUIPMENT	Laptop
DURATION	16 weeks Start: March 15th Finish: July 15th
RECOMMENDED SCHEDULE	1 afternoon a week (1 afternoon = 4h)