

'Research Insider': «DronePlan: mapping, motion planning and tracking for UAVs»

Data: venres, 29 setembro, 2017 - 10:00 - 11:00

Lugar: CITIUS Assembly Hall

Poñente(s): Manuel Mucientes (Principal Investigator)

Idioma: Inglés

Streaming: Por confirmar



DronePlan is a research project with the goal of developing the key components for perception and planning on UAVs. In this talk, Manuel Mucientes will focus on four of these modules: 3D mapping, motion planning, visual detection and tracking of objects.

First, he will describe the generation of 3D maps from monocular cameras through the depth estimation from images. Then, he will present motion planner that was designed in DronePlan: the planner takes into account the cinematic restrictions of the UAV, manages the uncertainty of sensors and control and works with adaptive precision.

The detection of objects using deep learning techniques will be explained and some results of visual tracking of objects with application to traffic monitoring will be shown.