



TÉCNICO
LISBOA



Contribution ID: 8

Type: **not specified**

Smart fingertip tactile sensors for agrorobotics applications

Tuesday, 7 July 2020 14:50 (15 minutes)

In the agricultural business, as well as in distribution networks and packaging industry, food items suffer changes that need to be controlled. In particular, in fruit/vegetable handling there is crescent effort to introduce automated technologies for manipulation and optical inspection. In this project, a tactile sensor will be implemented that allows for a quick evaluation of the quality of the fruit/vegetable when being handled by a robotic hand. Particularly, the student will dedicate himself to develop e-skin technologies and sensors embedded in elastomers and artificial skin in a way that combines the tactile ability with a more sensitive perception of texture. Various detection strategies will be probed, with the implementation in a multiparametric integrated sensor in a robotic hand as the final goal.

Primary author: LOPES, Nuno

Presenter: LOPES, Nuno