

Dear students,

We are writing to let you know about an open call for [two job offers](#) and two final project proposals that may be of your interest.

The [two job offers](#) consist in two part-time contracts of 20 hours per week during 5 months (march – july) working in the development of tasks from [PAgFruit](#) (GRAP-UdL) project. These tasks will be related with the use of sensors and computer vision for fruit detection in apple orchards, with the objective of yield prediction (estimate the number of fruits produced by apple trees days/months before harvesting). Since these tasks are related with the competences of the Master in Computer Vision, we believe that part of the work carried out in these jobs could be used for the master final project.

This call is offered by the [Research Group in AgrolCT & Precision Agriculture from University of Lleida](#) under the [PAgFruit](#) project framework. Although being a call from University of Lleida, teleworking is allowed, thus, we believe that this work is compatible with the Master in Computer Vision studies. In the following we summarized the open call:

Tasks to develop by the employers:

- RGB-D and LiDAR data processing
- Data annotation
- Implementation and training of Deep Neural Networks for fruit detection and size estimation in RGB-D images and/or LiDAR point clouds.
- Implementation of multi-object tracking methods in RGB-D videos for fruit counting.
- Support to other research lines of PAgFruit project (geometric characterization of trees, sensors and technology setup, ...).

What do we offer?

- Salary in accordance with the labor category Group II (with a complement for working position type U) specified in the [Collective Labor Agreement for Catalan Public Universities](#).
- Possibility of teleworking.
- Flexible schedule.
- The employee will have the opportunity to use part of the work carried out during this job in his/her final master thesis.

Requirements:

- Bachelor degree
- Knowledge of Python programming to solve computer vision problems through Deep Learning
- Submit the documentation required in the call before the 9th of February.

On the other hand, we have also published two final master project proposals related with the PAgFruit project:

- [3D fruit detection and size estimation using graph neural networks](#) (Supervisors: Javier Ruiz and Jordi Gené)
- [Fruit detection and tracking in RGB-D videos](#) (Supervisors: Ramon Morros and Jordi Gené)

The students interested in the offered labor positions and/or the final project proposals, please, contact Jordi Gené Mola (UdL) <jordi.genemola@udl.cat>, Javier Ruiz Hidalgo (UPC) <j.ruiz@upc.edu> or Ramon Morros (UPC) <ramon.morros@upc.edu>.