PhD Fellowship Offer in Computer Vision for Plant Phenotyping

Research context

Computer vision for plant phenotyping has emerged as a hot research topic in a context of food security. The offered PhD project contributes to a collaborative research program which aims at characterising the growth dynamics of varieties of winter wheat resistant to different stress by means of multimodal computer vision. The objective is to develop a platform for crop phenotyping by combining data obtained from different types of sensors and cameras. The measurement of morphological and physiological traits of plants and their time evolution during the whole growing season will be related to the general plant health status and the resistance to lodging by using advanced machine learning techniques.

PhD project

In the frame of this collaborative program, we are looking for a PhD candidate to develop models based on data fusion and advanced machine learning algorithms in order to characterise the health status of cereal crop by means of 3D, multispectral and hyperspectral plant images. The candidate will be in narrow collaboration with crop scientists to integrate agricultural data. The candidate will also be involved in tasks of scientific communication.

Profile

The ideal candidate will be expected to work with a dynamic team of sensing scientists, crop scientists, computer programmers, and technicians in mechatronics. The successful candidate will be motivated, have excellent writing skills, and work well within a collaborative research environment. The candidate must have a Master degree in computer engineering or equivalent with a large interest for machine learning. Experience in working with complex datasets is recommended.

Conditions

The PhD fellowship is available immediately for 2 years, with the potential for renewal in order to pursue a 4-year PhD project. The grant is funded by the Walloon Public Service of Belgium.

Contact

For more information contact Prof. B. Gosselin (bernard.gosselin@umons.ac.be). Application including cover letter and curriculum vitae can be sent to B. Gosselin before 15 February 2019.