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PROJECTE DE DOCTORAT INDUSTRIAL EXPEDIENT 2015 DI 010

DADES DE L'EMPRESA I DE L'ENTORN ACADÈMIC

Títol del projecte

FASHION DISCOVERY: A COMPUTER VISION APPROACH.

Empresa

Wide Eyes Technologies S.L.

Responsable de l'empresa

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BREU DESCRIPCIÓ DEL PROJECTE DE RECERCA

Fashion has a large impact in society and is a multi-billion dollar industry. Online sales in the year 2017 are expected to reach 191 billion Euros in Europe and 370 billion dollars in the USA. Developing tools to improve the interaction between sellers and buyers will be of paramount importance.

In this project we will exploit current advances in computer vision and machine learning to explore large amounts of publicly available fashion data, for automatically reasoning and discovering patterns and trends. This data, besides images and videos, may include varying types of meta-information such as categorical attributes or textual descriptions. Processing this diverse “big data” will not only require advanced machine learning algorithms, but also developing very efficient approaches.

The project will consist of two phases:

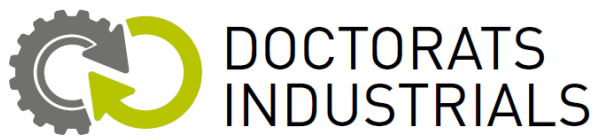
Initially, the student will participate in the creation of a large fashion dataset and develop efficient algorithms for the extraction of low and mid level features, such as 2D human pose estimation, foreground/background segmentation, and garment segmentation. In a second stage, she/he will work on improving its implementation to be able to scale and distribute well to large datasets, as well as integrating it with the Wide Eyes infrastructure.



Generalitat de Catalunya
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The project will be carried in cooperation with the following three institutions:

- Institut de Robòtica i Informàtica Industrial in the Universitat Politècnica de Catalunya.
- Wide Eyes Technologies, in Barcelona.
- Waseda University (Tokyo, Japan), institution to which one of the academic co-advisors belongs.