Jorge Bernal Del Nozal

Presentation - Jorge Bernal is a postdoctoral researcher at the Universitat Autònoma de Barcelona, Spain. He is member of the Computer Science Department and he is associate researcher at Computer Vision Center, Spain. He is the head of the Image Sequence Evaluation research group (ISE lab), which is composed by 4 PhDs, 2 Technical Support Engineers and 3 PhD students. His main current research line is the development of Intelligent Systems for Colonoscopy, aiming to



mitigate the impact of colorectal cancer by detecting its precursor lesion (polyps) and by classifying the detected lesions according to its degree of malignancy. During his short research career, he has already taken part in the following publications: 9 indexed journal articles (including contributions in Pattern Recognition, IEEE TMI and Endoscopy), more than 20 contributions to international conferences and workshops (winning best paper award in MICCAI CLIP 2013, MICCAI CARE 2014 and MICCAI CLIP 2015). He is also one of the main organizers of Gastrointestinal Image ANAlysis sub-challenge at MICCAI, part of EndoVis challenge. He has also been Principal Investigator of two public funded research and technological transfer projects on the development of Intelligent Systems for Endoscopy.

Research project - One of the main limitations of the development and validation of intelligent systems for health is the lack of public annotated datasets in which to test the performance of automatic methods. To cope with this, several efforts have been undertaken to organize international challenges in which researchers share their knowledge and assess the performance of their methodologies over a common public validation framework. As part of my collaboration with ETIS lab at ENSEA, we have organized two international challenges at the main conference of our research domain (MICCAI) on the topic of Gastrointestinal Image ANALYSIS. During the research stage at ENSEA, I will collaborate on the analysis of the results extracted from the challenge held in September 2017 at Quebec, Canada. This analysis will result in the preparation of two different journal articles summarizing the main findings discovered from the challenge; these two articles will be written and coordinated jointly between Jorge Bernal (UAB-CVC) and Aymeric Histace (ETIS lab, ASTRE team, CNRS, ENSEA). Apart from this, I will also continue my collaboration with the team led by Aymeric Histace on the development and validation of real time methods for automatic polyp detection in colonoscopy videos, aiming to progress towards an effective deployment of our technology in the exploration room.

Events -

• Conference: Smart Videocolonoscopy, February 13th, 2018 @ 17h30, ENSEA

https://iea.u-cergy.fr/fr/actualite-1/chercheurs-invites/inex-paris-seine/jorge-bernal-del-nozal.html