Contribution ID: **27** Type: **Oral**

Variational Autoencoders for Medical Imaging

Thursday 24 October 2019 12:00 (30 minutes)

With the advent of deep learning-based techniques, new approaches and novel architectures are proposed every day, improving the state of the art in almost every technical discipline, including medical imaging. Autoencoders are one of the most popular unsupervised deep learning techniques. Thanks to their unsupervised nature, autoencoders, and its several variants, such as variational autoencoders, provide high-capacity, unbiased, multi-dimensional vector representation of information, proving effective in many applications, including feature extraction, diagnosis, and image reconstruction. In this presentation, we will review some of the most recent advances of deep convolutional autoencoders, but always with a special focus on their practical applications in medical imaging, including prenatal and cardiac imaging.

Primary author: CERROLAZA, Juan (Accenture Iberia - Artificial Intelligence Group)

Presenter: CERROLAZA, Juan (Accenture Iberia - Artificial Intelligence Group)

Session Classification: Plenary