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## **8-Automated ECG classification using Deep Neural Networks to predict arrhythmia recurrence in patients with atrial fibrillation**

*Wednesday 16 February 2022 10:50 (13 minutes)*

It is currently not possible to predict the evolution of patients with arrhythmia after clinical intervention. For that reason, we intend to pursue this goal using a computational approach, consisting in neural networks that take electrocardiograms as inputs. It is believed that the P-wave in the surface electrocardiogram is related to the arrhythmia condition, and holds predictive features concerning the patient's evolution. The first step of our project is to filter the noise of the electrocardiogram, and then we apply machine learning techniques to all the data we have. By doing so, we anticipate an algorithm for automated ECG beat classification that predicts arrhythmia evolution in patients. This will be very important for clinical purposes and medical decision.

**Author:** GALVÃO, João (IST)

**Presenter:** GALVÃO, João (IST)