

# Applied AI in Biomedicine - Workshop Report

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img/windowing.png

## C. Class imbalance

### III. IMPLEMENTATION

### IV. RESULTS

### V. DISCUSSION

### VI. CONCLUSIONS

## I. INTRODUCTION

### A. Dataset

## II. DATA PREPROCESSING

The available raw dataset undergoes a pre-processing phase necessary for the optimal interfacing between the data and the model.

### A. Exploratory Data Analysis

### B. Signal Windowing

The heartbeat-by-heartbeat classification that the model performs implies the necessity of splitting the 30 minutes recording of each patient in windows, each one to be processed separately by the network: choosing the proper width and the optimal windowing approach is key in obtaining the best model performance. Three different approaches have been taken into consideration when splitting the windows, which are graphically compared in *Figure ??*.