

ECG Heartbeat Classification for Arrhythmia Detection: A Machine Learning Approach

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Abstract—

Index Terms—ECG, arrhythmia, machine learning, random forest

I. INTRODUCTION

Arrhythmia is a term refers to any problem that relate to abnormal heartbeat rhythm. There are mainly 2 types of arrhythmia. A heart beats too fast (more than 100 beats per minute when resting) is called tachycardia [1]. A heart beats too slow (less than 60 beats per minutes when resting) is called bradycardia [2]. Tachycardia can cause fainting and thrombosis (i.e., blood clots blocking blood vessels). Bradycardia, although it can be normal for most cases, especially for healthy people or athletes, it could lead to many symptoms such as chest pain, confusion, memory problems, etc. Therefore, being able to classify

II. DATASET

A. Preliminary Information

B. Data Analysis

III. EXPERIMENT

IV. CONCLUSION

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