
ECG Classification



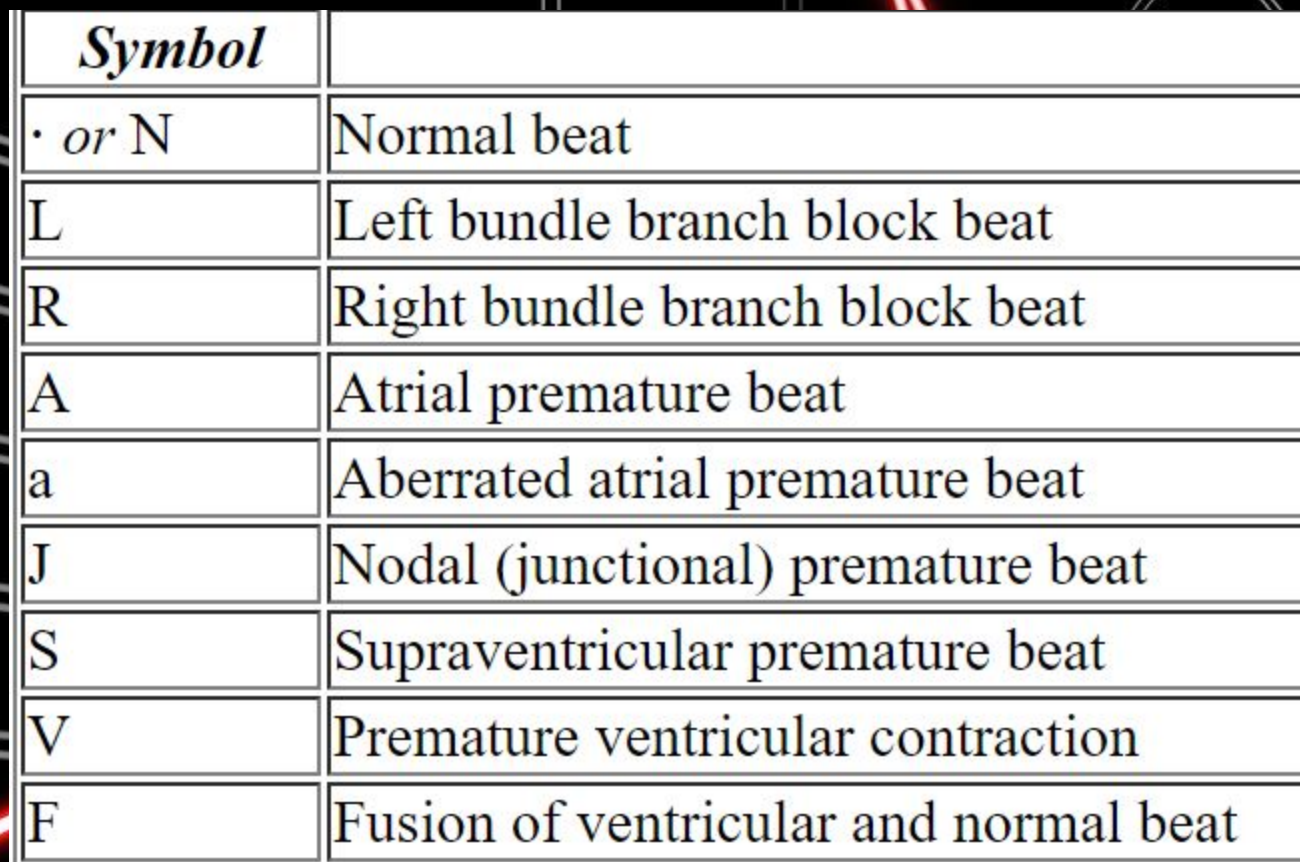
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Goal

- Classify ECG signals to detect whether someone has arrhythmic heartbeats or normal heartbeats
- 18 classes for irregular arrhythmic heartbeats and 1 class for normal heartbeats
- Useful for diagnosing patients for heart arrhythmia

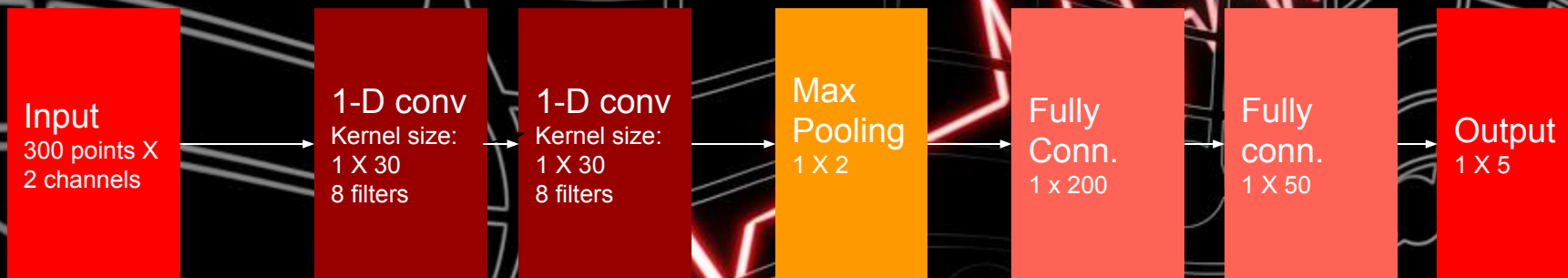
Approach

- Each sample is an array of numbers which correspond to voltage from an ECG electrode
- Final approach used 1 dimensional convolution to find a pattern in the voltage data



<i>Symbol</i>	
• or N	Normal beat
L	Left bundle branch block beat
R	Right bundle branch block beat
A	Atrial premature beat
a	Aberrated atrial premature beat
J	Nodal (junctional) premature beat
S	Supraventricular premature beat
V	Premature ventricular contraction
F	Fusion of ventricular and normal beat

Model Specification





Demo