**Sequence Analysis Lab 2**

**Document Id 30**

**Definitions**

<https://en.wikipedia.org/wiki/Heart_rate_variability>

1. time interval(RR ) between heartbeats ⇐> time interval between peaks
2. Regular signal ⇒ consistent pattern <= symmetric
3. Can be reduced to a binary signal { off, off, on, off,......} => {0,1,0, 0,1,0 …..}

If the time between heartbeats changes to much too quickly => you are probably sick

If the peak stops the it's all over, so by identifying the change in the RR interval we can

save the patient's life

Basic idea is we need to not only detect the peaks but also other information such as

the interval between the peaks and information about how this interval is changing

**Practical Task Simple Peak detection**

given a binary signal

{ 0, 1, 0, 0, 1, 0, 0, 1, 0}

Find the RR interval for the peaks

Hint

The RR interval is the max slice size that contains a peak, here its 3