

# Machine Learning Techniques applied to Heart Rate Variability

Final report for the Machine Learning course of the Technical  
University of Denmark

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2019-12-13

## **Introduction**

Heart Rate Variability (HRV) is a way to measure the variation in time in between each heartbeat (Campos (2017)). This variation is a measure of how the heart reacts to physical exercise, mental stress and heart diseases (Maritsch et al. (2019)).

The reason why HRV has become more relevant is because it's now accessible through one's quantified self via wearable smart devices, such as the Apple Watch.

## References

Campos, Marcelo. 2017. “Heart Rate Variability: A New Way to Track Well-Being.” 2017. <http://www-cs-faculty.stanford.edu/~uno/abcde.html>.

Maritsch, Martin, Caterina Bérubé, Mathias Kraus, Vera Lehmann, Thomas Züger, Stefan Feuerriegel, Tobias Kowatsch, and Felix Wortmann. 2019. “Improving Heart Rate Variability Measurements from Consumer Smartwatches with Machine Learning.”