3rd Year Project Final Report SleepAppnea

George Cochrane, Sachin Mylavarapu, Tuan Anh Le, Sophie Louth March 18, 2014

Abstract

The abstract text goes here.

1 Introduction

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

1.1 Subsection Heading Here

Write your subsection text here. Add something. Add something else.

2 Medical Information

3 Rationale

4 The app

5 Design Process

5.1 Questionnaire selection

5.2 Signal Analysis - simple method

5.3 Machine Learning – Theory

Machine learning, a branch of artificial intelligence, concerns the construction and study of systems that can learn from data [1]. The supervised classification problem in machine learning concerns finding the unknown target function that classifies certain input data into classes based on some set of training examples containing labelled input data.

blablabla

- 5.3.1 Support Vector Machines
- 5.3.2 State-Space Models
- 5.3.3 Hidden Markov Models
- 5.3.4 Dimensionality Reduction

 $\mathbf{Spectrograms}$ sdffasdf

Principal Components Analysis fdsafasd

5.4 Machine Learning - Experiments

5.5 Android

6 Conclusion

References

[1] Wikipedia. Machine learning — Wikipedia, the free encyclopedia, 2014. [Online; accessed 18-March-2014].