Using PCA on EEG Data to Differentiate Sleep Stages

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***Abstract*—**

I. Introduction

II. Study of Literature

given paper [5]
first work on pca [6] and [3]
when does pca fail? [8]
book containing sleep phases eeg [1]
papers trying to solve similar problem [9] and [7]
competition using similar data set [2]
winner of competition [4]

III. Mathematical Basics

IV. Principal Component Analysis

V. Sleep Stages and EEG Data

VI. Data and Algorithm

VII. Results

VIII. Conclusion

References

[1] William F. Ganong. *Review of medical physiology*. Appleton & Lange, Stamford, Conn, 18. ed edition, 1997.

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[3] Harold Hotelling. Analysis of a complex of statistical variables into principal components. *Journal of educational psychology*, 24(6):417, 1933.

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