

PROJECT II, BIOSTAT620

Due: April 6, 2020

Do this project with a group

The objective of this project is threefold:

(i) To establish a primary study objective that can utilize Empatica E4 wearable data collected from a group of five people. Clearly state hypotheses related to the proposed study objective to investigate. It would be nice to have a strong premise to support the hypotheses; (ii) synchronize individual data, ACC (vector magnitude), TEMP, HR, EDC into median per epoch (e.g. minute); and (iii) merge five data sets together as needed.

This project should include the following components:

Introduction: objective, hypothesis, motivation, etc.

Data description: background, potential event(s) of interest or label(s) of interest from personal diary.

Data preprocessing: data merging, and extract relevant data to event of interest.

Data analysis: descriptive statistics, modeling, supervised learning, unsupervised learning, prediction, or others, whichever methods you think are appropriate to achieve the study objective and provide answers to the hypotheses.

Conclusion & Discussion: What was your experience of data analysis? What have you found to be most interesting and surprising? What is the future work?

Each project should be prepared with one-inch margins, in 12-point size letters and no more than 25 lines per page, double-spaced throughout. The first page should include a title, authorship, key phrases, and a one-paragraph abstract. The abstract should not exceed 200 words. Each project should not exceed 6 pages, including title, authors, abstract, key phrases, figures and tables as well as references.