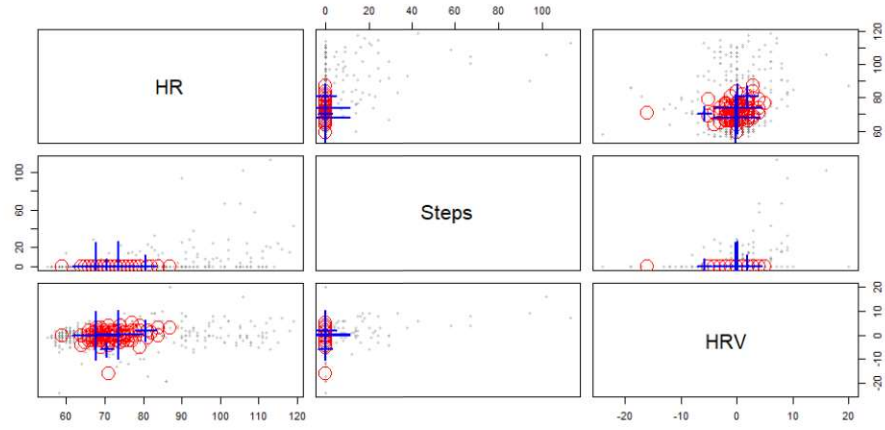
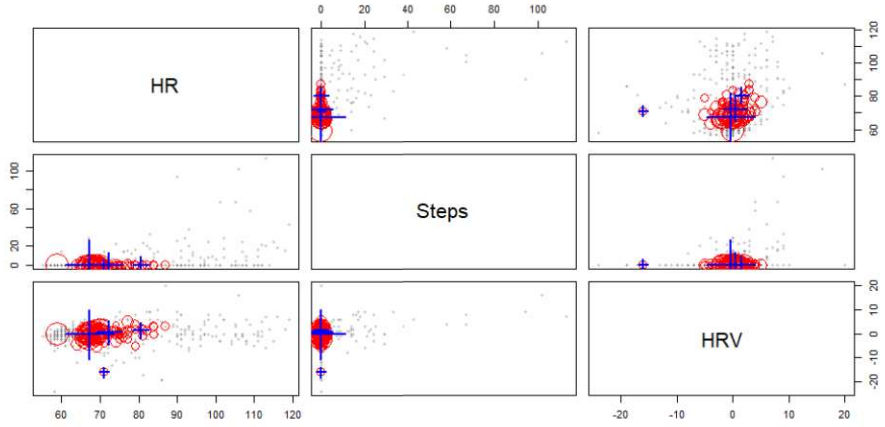


Appendix

A Figures

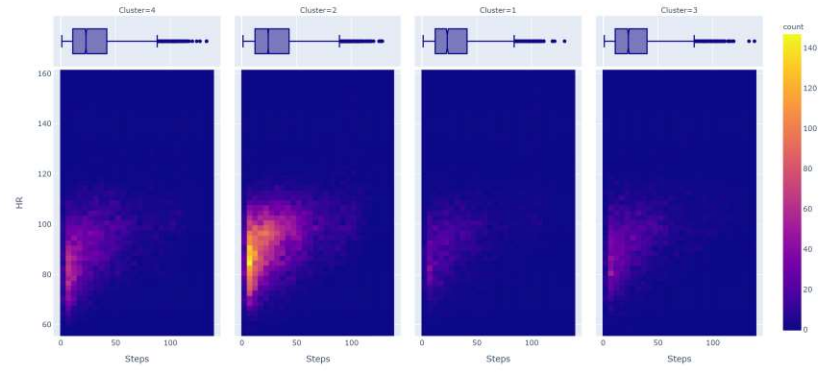


(a) Sliding time window model.

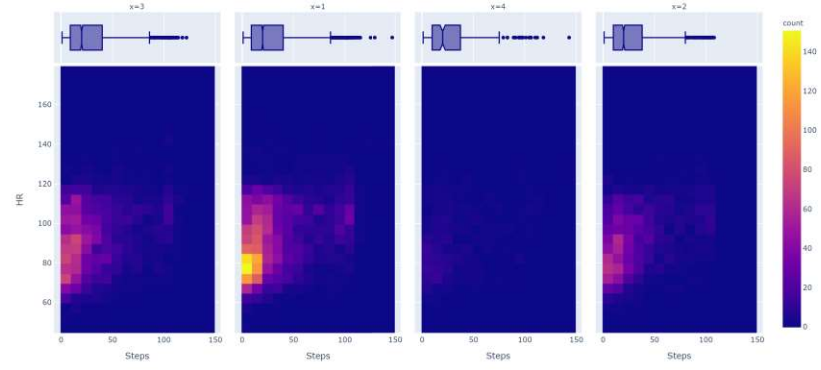


(b) Damped time window model.

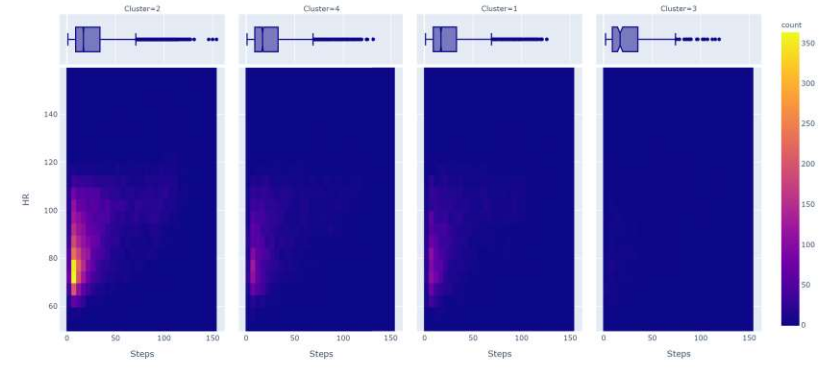
Figure A.1: Macro-cluster (blue crosses) and micro-clusters (red circles) results for Participant 19 using the sliding time window model and damped time window model.



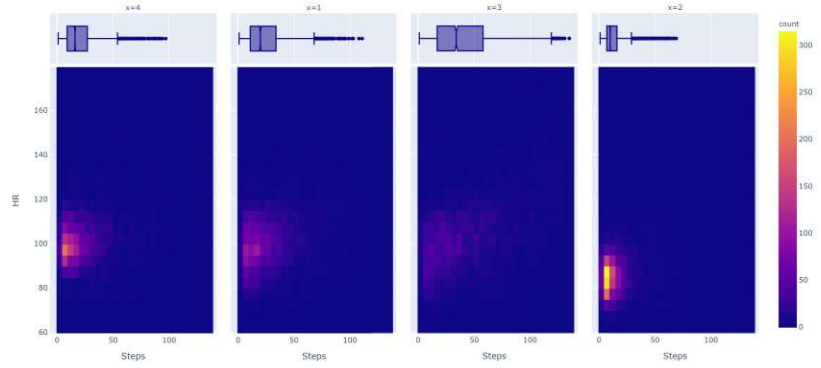
(a) Participant 12.



(b) Participant 18.



(c) Participant 19.



(d) Participant 20.

Figure A.2: Density heat map for Participant 12, 18, 19, and 20.

B Tables

Table B.1: Selected input variables for clustering the data points.

Variable	Description
HR	Heart-rate/min
Steps	Steps/min
HRV	Heart Rate Variability

Table B.2: The input data for stream simulation

Timestamp	Steps	HR	HRV	PID
Mar-6-2018 12:00:00 AM	0	71	0	18
Mar-6-2018 12:01:00 AM	0	71	0	18
Mar-6-2018 12:02:00 AM	0	69	-2	18
Mar-6-2018 12:03:00 AM	0	70	1	18
...
...
Apr-30-2018 11:58:00 AM	0	65	-2	18
Apr-30-2018 11:59:00 AM	0	66	1	18

Table B.3: Participants in the experiment.

Participant	Description
12	59 year old female
18	30 year old female
19	28 year old male
20	60 year old female