PsychoPhysioPipeline

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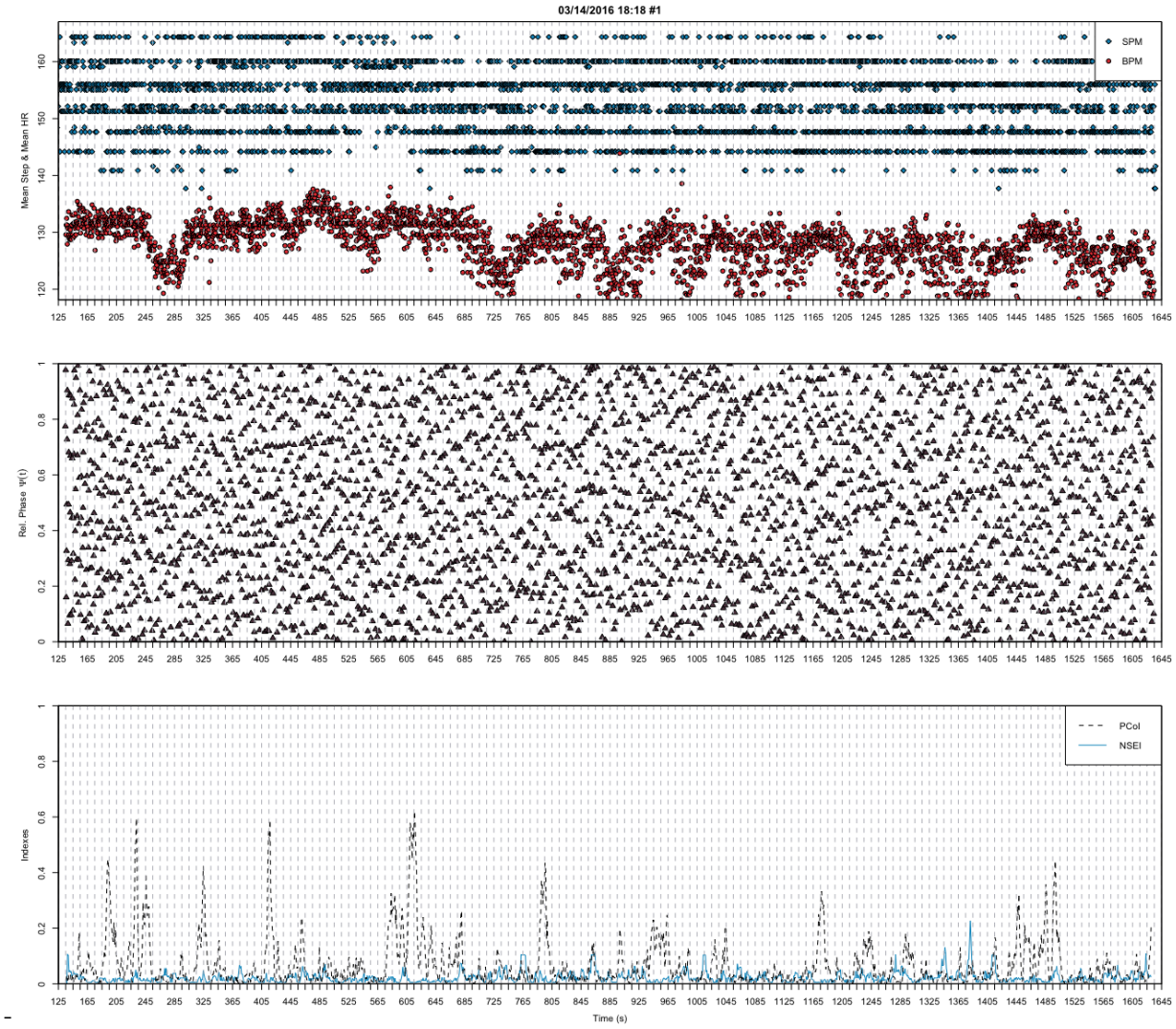
Software Repository: https://github.com/sbogutzky/PsychoPhysioPipeline
Software Archive:

Summary

I present PsychoPhysioPipeline, a pipeline of several small R programs for segmenting the collected data of the PsychoPhysioCollector (Bogutzky 2016), for identifying potential implicit flow characteristics and for their analysis. The pipeline allows researchers to correlate physiological, kinematical and subjective variables, as well as to analyze fluctuations over time. The pipeline supports the calculation of explicit flow dimensions based on the Flow-Short-Scale (Rheinberg, Vollmeyer, and Engeser 2003) and the calculation of the jerk-cost (Hreljac 2000) and the cardiolocomotor phase synchronization (Niizeki and Saitoh 2014) as potential implicit flow characteristics. The pipeline uses the free HRV software Kubios HRV (Tarvainen et al. 2014) to compute RR intervals from ECG data and calculate HRV parameters. The pilot deployment was successfully used in the research project Flow-Machines ("Flow-Machines: Body Movement and Sound", 2012-2015) at the University of Applied Sciences Bremen and funded by German Federal Ministry of Education and Research (BMBF; Förderkennzeichen: 03FH084PX2).



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