Statistics Education and Educational Research Based on Reproducible Computing

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This workshop may be useful for anyone with an interest in one of the following three topics:

(a) Statistics Education within the pedagogical paradigm of social constructivism,

(b) Educational Research based on objectively measured learning activities which have never been available before,

(c) Empirical Research which is fully reproducible – this is called Reproducible Computing which supports communication, collaboration, and dissemination of research results.

The main focus of this workshop is on Statistics Education or any type of education where students need to be able to interact with and communicate about empirical research results. In this sense, the workshop may be of interest to academics from various fields.

The second focus is on Educational Research and Quality Control (of the course environment). The workshop clearly illustrates how the learning outcomes (as measured by objective exams) can be related to (or predicted by) various factors such as: objectively measured learning activities, learning attitudes, social interaction/networking, etc... The model that describes such a relationship is useful for research purposes and allows us to control/improve the quality of our education.

Anyone with an interest in presenting Empirical Research results in a form which allows readers to fully reproduce and reuse the underlying computations, may find this workshop useful too. The pedagogical focus of this workshop does not imply that Reproducible Computing technology is solely useful for educational purposes.