Kavid Kahle

Statistical Science / College of Arts & Sciences

Baylor University Interactive Statistics Modules (BaylorISMs)

In teaching statistics, recent studies indicate that statistics training based on interactive simulation is significantly more effective than the more traditional method of training with a textbook. While several online statistics resources currently exist to provide such training, every resource known to the investigators is either 1) costly, 2) reliant on a proprietary statistical computing environment such as JMP or SPSS, 3) outdated and no longer maintained, 4) tied to a single platform (Windows or Mac), 5) not interactive, or 6) seriously limited in scope of topics. This proposal is for a pilot program to develop a comprehensive online library of free interactive statistics modules which operate through any standard web browser and are based on the state of the art, cross-platform and free Computable Document Format (.cdf) newly released by Wolfram Research, the makers of Mathematica and WolframAlpha. Design and implementation of the modules will bring together a faculty member, graduate student and undergraduate student in a vertically integrated development team. It is hoped that these modules will not only contribute to an improved classroom and at-home learning experience for current students, but also serve many other aspects of the mission of the Department of Statistical Science in the coming years.