A ROBUST METHOD TO IDENTIFY THE STATISTICAL LEARNING ABILITIES OF STUDENTS

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Identification of the statistical learning abilities of students in a certain population is useful for statistics educators. The success of this task can not only help improve the performance of statistical learning for students, but can also help reduce the loading of educators. While we have collected many characteristics for a student that are useful for the identification of his/her learning ability, the process of constructing the prediction model can suffer the problem of outliers that can make the identification results totally biased. In this work, we propose a robust procedure for the identification of students that are less affected by the presence of outliers. The newly developed identification procedure is shown to well reflect the learning ability of a student.