Improve Software Effort Estimation using Weighted KNN in New Feature Space

Abstract – According to increment of software and application requisition, present a stringent and reliable model for effort estimation is necessary. In this paper a feature extension method has been proposed, in order to increase the accuracy. In this way quadratic mapping has been used as feature expander. Quadratic mapping construct more discriminative features, therefore it can gain better result. Although use mapping causes dimensional increment, the results will be more accurate, especially when using W-KNN (Weighted-K nearest neighborhood) as regression model. It should be mentioned, according to shortage of data in this field, dimensional increment, don't cause a serious problem, and processing can be run on a usual home pc.