Abstract

This research proposes a new method of modeling typing time of each Thai typing learner. Because, in building new typing exercise or re-aligning keyboard layout, testing by human is needed. Due to time, cost and human constraint (that human can test only once), this research proposes a method in which an intelligent agent is trained instead of a user to construct typing lesson or keyboard layout that best fit with each user.

This research proposes an idea of using a tree model which uses clustered data by K-means algorithm to construct a regression model that best fit with each user. The experimental results comparing the ordinary Model Tree, Artificial Neural Network and Linear Regression were measured by Root Mean Square Error (RMSE). The average RMSE obtained from the proposed method is 3.135 centiseconds which is significantly better than other methods run in our experiments using 10-fold cross validation method.