

International Conference on **Big Data Analysis and Data Mining**

May 04-05, 2015 Kentucky, USA

Descriptive and predictive analytics of student graduation

Ace C Lagman

Far Eastern University, Philippines

Educational Data Mining is an emerging area of data mining application. It is concerned in describing and predicting patterns into huge amount of data usable to educational settings. The patterns will be used as a support for student academic achievement prediction. One main topic in educational data mining is the student graduation. The student graduation rate is the percentage of a school's first-time, first-year undergraduate students who complete their program successfully. Most students first year freshmen enrolled in tertiary level failed to graduate. According to National Center for Education Statistics, almost half of the first time freshmen full time students who began seeking a bachelor's degree do not graduate. Seidman (2005) defines student retention as the ability of a particular college or university to successfully graduate the students that initially enroll at that institution. The colleges and universities consisting of high leaver rates go through loss of fees and potential alumni contributors. The study focused on generating data models from different data mining classification algorithms which include decision tree, neural network, naïve Bayes and logistic regression for student graduation prediction that will enable administration to early identification of at risk students in order to provide timely help. The data sets include student demographic profile and conditions and first year first term academic performances and entrance examination results. The early identification of vulnerable students who are prone to drop their courses is crucial for the success of any retention strategy and helps improve and increase the chance in staying in course chosen.

aclagman@feu-eastasia.edu.ph

Notes: