**Name** : Mr. Adisak Phromla

Mr. Phakhawat Chandee

**Project name** : The System for Prediction the Occurrence

of Undergraduate Student Depression

**Field of study** : Information technology Faculty of Science

Buriram Rajabhat University

**Project Advisor** : Assistant Professor Dr. Wilairat Yathongchai

**Project Advisor (Co)** : Dr. Chusak Yathongchai

**Year** : 2020

**Abstract**

This research aims to 1) build a prediction of the occurrence of undergraduate student depression model using data mining techniques with the decision tree techniques and 2) develop a prediction system of the occurrence of undergraduate student depression. The data used to create the model were from the student’s depression questionnaire, in a total of 620 data, and uses Weka program with decision tree technique to classify the data and J48 algorithm to create the model. The rules were then applied to develop an Android-based application of the prediction system of the occurrence of undergraduate student depression that uses JavaScript language, NodeJS engine, React-Native Framework, and MySQL database management system.

The results showed that the model has 15 attributes and the performance was measured by using 10-fold cross validation method with an accuracy of 90.2%. The prediction system consists of 2 parts; for the user’s part, the user can be able to do their own evaluation where the system will show the results of the prediction in 4 levels; normal, mild depression, moderate depression, and severe depression, along with a suggestion for the users to follow, and for the admin part, admin can be able to edit the suggestion data, view user’s usage report, and user’s evaluation report. The average user satisfaction was 4.39 and the standard deviation was 0.65.