

MSc Project Report

NEW EMPLOYEE ATTRITION
PREDICTION IN THE FIELD OF
MEDICAL MARKETING PERSONNEL IN
SRI LANKA

A Dissertation by
Mewan Alwis

Supervised by
Dr. Sameera Vishwakula

IIT STUDENT ID: 2017036

RGU STUDENT ID: 1616187

2019

A report submitted as part of the requirements for the degree
of MSc Big Data Analytics at Robert Gordon University,
Aberdeen, Scotland

Abstract

Employees are considered as one of the most valuable assets of any organization. Modern day organizations invest considerably on them and therefore unexpected early departures would be costly in terms of money, time and loss of business. Many attempts have been made in the area of attrition prediction but lacks in the scope of new medical marketing rep hiring and the aim is to find a solution.

Employee attrition prediction has been researched in the past and mix of algorithms, such as SVM, Logistic Regression, Random Forest and KNN, have been tested for their suitability. Having a unique situation and dataset, this research aims to find suitable algorithm through an optimum parameter selection.

This research as able develop a classification model for new employee attrition and a unique dataset with fresh recruiter attrition that performs well at an 70% accuracy. The applications and implications of the classification model applied is debated and assessed in the project report.

Keywords:

Data mining, Machine learning, Cloud computing, Python, Scikit-learn, Azure Machine Learning service, Supervised learning, Classification