

MODELING GRADUATE EMPLOYABILITY IN SRI LANKA USING BINARY LOGISTIC REGRESSION: A CASE STUDY ON EMPLOYMENT SURVEY DATA OF FRESH GRADUATES

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The Computers have displayed an exponential growth in terms of their competencies ever since their invention while programming languages has expanded the horizon of the potentials of them. Python has emerged as a complete programming solution in the vicinity of developing data science applications. Today Python has become one of the central languages in data mining offering both a general programming language and ever-evolving libraries specifically targeted numerical computations. The paper discusses about the features and characteristics of Python programming language in relation to a scenario of Graduates Employability survey data using Logistic Regression Model. The preliminary objective of this study is to evaluate the employability of the graduates of the Faculty of Social Sciences and Languages in the Sabaragamuwa University of Sri Lanka during the year 2017 and 2018 at the time of their graduation. A comprehensive review of literature on graduate employability has been followed with an analysis of the country's situation, using descriptive statistics and Binary Logistic regression. Primary data, being the main source of data has been collected from the graduates of the year 2009/2010 and 2010/2011 batches through a structured questionnaire and has been analysed using a descriptive approach. The analysis has been conducted through the categorical variables of gender, ethnicity, nature of the degree, medium of instruction, class of the degree, performance for English subject at the ordinary level at school, residential background, type of the school, level of education of the parents, and salary expectation to test whether they consist an influence to the employment after the graduation.

Keywords: *Graduate employability, Python, Unemployment, Binary logistic regression model*