

Bangabandhu Sheikh Mujibur Rahman Science and Technology University
Department of Computer Science and Engineering

Research Proposal

Research Title: Predicting CSE Undergraduate Students' Careers Using Machine Learning Algorithms in the Context of Bangladesh.

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Abstract/Summary (Optional): In the present situation, students must decide which career sector best suits them by determining which academic courses are completed and which skills they have. The students have to go through many available options to draw the career path. In this research, we will predict the career a CSE student can select after graduation using machine learning classification techniques in the context of Bangladesh. The objective of the research is to find the factors that can affect students' decisions to choose the right career path using machine learning techniques.

Introduction: A lot of students choose to pursue careers in CSE because of their interest in the field or parental pressure. However, choosing the right career path has become complex due to numerous career options and job competitions. This research aims to develop a classification model for predicting careers focusing on students' skills, interests, academic results, and some key factors.

Related Literature Review: Several recent studies have examined the prediction of careers in the general case or engineering field. In the context of Bangladesh, we examined the career prediction of CSE undergraduate students. We will mainly focus on the skills that a student may have in their undergraduate period. This thesis also analyzes the key factors that affect the career choice.

Research Methodology: 'Predictive analytics' is the use of data to predict careers. Our study's focus is on quantitative analysis of our collected dataset. We collect the data from different public and private universities in Bangladesh. In detail, we present the data set used in this work, describing all algorithms used in prediction along with the procedure performed on the collected dataset.

Expected Results: We will be able to predict the career of CSE undergraduate students from Bangladesh. Also, the results of our study may find that the key factor that affects the choice of career.

Significance and Implications of the Study: This case study aims to offer significant insights that will assist students from Bangladesh in making informed career choices. By analyzing key factors influencing career decisions, the study seeks to guide students toward paths that align with their skills and aspirations. Although the study will strive to collect a comprehensive dataset, it may not be feasible to capture data from every student. Nonetheless, the findings are expected to be representative and will provide actionable recommendations to enhance students' decision-making processes and skill development.

Signature of the Board Members: (Use for presentation's Board)

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Supervisor Signature and Seal

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Comment: i) Accept ii) Conditional Accept iii) Not Accept
Recommend for Project Exhibition: Yes / No