

# Graduate students job and salary prediction

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## Description

Job availability is not enough for the graduate students in our country. Therefore, the job provider try to take best one. Detecting the factors, those make one a best one in his sector is important. Our goal is finding the factors affecting the job opportunity so that student can give attention to improve those. Nowadays, some of CSE student depressed about their job opportunity. They have no statistics of their seniors and they don't know which factors are responsible for getting a better job. Consequently, they complete their graduation somehow and make intention to take MBA, CA even BCS although he has studied in a productive and technical subject. Some are also involved in business. Therefore, we will try to investigate the factors that affects the chance of getting better jobs based on the data produced by the CSE graduate students and build a predictive model. The estimated model will be able to predict the chance of getting better jobs on the basis of background characteristics of an under-graduate student. As a result, the under-graduate student may be conscious about their lacking factors and may try to improve themselves. The prediction will continually motivate the students through identifying the strong and weak points of the students also. We will collect alumni's data on CGPA, study hour per day, attendance, communication skill, performance in contest, performance in extra curricular activities, political background, assignment and homework performance, study hour in science library, connection to elder brothers and teachers, time to get job, religious activity, father's status, marital status, having friends, tuition, job, salary etc. providing online form. Obviously, we will protect their privacy while collecting data. Then we will analyze those data using different statistical and mathematical methodologies to establish a model. And analyzing those data we will predict on undergraduate student's data. An undergraduate student will check his probability of getting good job, salary from his given data. He will understand his present situation with respect to other students with whom he is going to fight in future for a job. He will realize how much improvement he needs to get a better job. For this course as we have not enough time so we will work on CSE students of our university. But, in future we will generalize the model to predict for a student of any department.

## Objectives

- We take student's CGPA, study hour per day etc. as input.
- The output is probability of getting good job and it's salary.
- For this project we mainly use regression model. For doing this project we have not found any paper on same work yet. But we have supporting people. Md. Riaz Uddin one of our elder brother, MS students of CSE department and who worked on this sector, we talked with him and knew how he had done. He give us some idea and technique to collect data easily. We also talked with Momenul Haque Mondol, Senior Research Assistant, ICDDR,B who studied from ISRT of University of Dhaka. He advised us how to choose parameter and prepare questionnaire so that people give us data without hesitation. We will take help for our project from these persons and obviously from you.

## Challenges

The main challenge of the project is sampling and data collection. A good sample is very important to get a good output. It is very hard to meet manually with all the graduate persons since most of them are busy. Their locations are different and we don't know all of them. So, data collection is mostly online based. A lot of people do not feel interested to fill up an online form. Another challenge is learning some tools those are R, Mathlab and obviously some algorithms and methods.