Prediction and Analysis average income of the school graduates

Naixin Zhang

**Objective**

With the advent of the information age, information technology has constantly affected and changed all aspects of the economy, society, culture, and life. Among them, the education field has also been profoundly affected by the transformation of information technology. The capacity of the education information database has become larger and larger. For these large-scale data, the education field urgently needs an efficient information technology to process, analyze and use the data, further, excavate useful information for educators at different levels.

Based on the above research background, this project will use the machine learning algorithm as a tool to conduct an in-depth analysis of the College Scorecard Dataset from the U.S. Department of Education(<https://collegescorecard.ed.gov/data/>). This project will also establish both regression and classification models with the school characteristics as the input and the average income of the school graduates as the output. By using the data from 2000-2017, the average income of the school graduates can be reasonably predicted by the characteristics of a university, which will be a good aid to the effective allocation of funds such as education grants and the establishment of private schools.