DATASCI 203: Lab 2

Student Performance Metrics (Carla, Rohan, Yiwen, Theo)

Proposal:

Despite the significant investment in time and financial resources that is incurred by most students who start an undergraduate program, the overall graduation rate for students attending undergraduate courses in the United States was only 64% in 2020. Still, a four-year college degree is the most important indicator of economic success and a lot of research has been conducted to determine why some students are successful in college while others fail to earn a degree.

A number of datasets look at metrics that hope to predict academic success in college. We pose the question, "Is academic performance in high school a good predictor of success in college?" We propose that students who have higher GPAs in high school do well in college, either because they develop good study habits in high school, or because they are exposed to more preparatory material in the form of honors and AP courses. We use the Student Performance Metrics Dataset that tracks the academic performance of over 400 students at the University of Malaysia. This dataset contains survey information collected from undergraduate students across a number of academic departments, and the survey includes information on student demographics, academic performance, and extracurricular activities. For the purpose of this research we will compare students' GPAs from high school (X random variable) with their cumulative GPA in college (Y variable) to build a linear regression model which we will use to test for a consistent correlation.

Data Set:

Student Performance Metrics Dataset

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https://data.mendeley.com/datasets/5b82ytz489/1

Supporting Bibliography:

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