

## **ECE 143 – Project Proposal**

### ***Evaluation of Worthiness of Attending University***

Group 8

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As more and more people attend universities all over the world, tuitions and expenses also increase year by year. While getting education is definitely beneficial, is it really worth it spending years in university while taking out massive student loans to pay for it? We want to examine the cost of attending university and the potential employment payoff that come of it, how long it'd take to pay off related debt as well as employment potentials for various majors. Users will be able to examine data to address these concerns

To analyze the cost and benefit relationship, we need datasets in the following topics:

- University enrollment and graduation rates
- Tuition and boarding expenses
- Financial aid and scholarship awards
- Employment and salary for newly graduates sorted by industry

Upon collection of the above dataset, we'll first write loader scripts to import dataset files and sort out information contained in them. Then we can start computing all related costs of attending university taking into account financial assistance and enrollment/graduation rates. Thirdly, we need to carefully categorize salaries across industries and associate them with corresponding major. Finally we can look at the overall statistics and correlations to answer our questions if attending university is really worth it.

Most of the statistics can be found on US Department of Education website (<https://www2.ed.gov/rschstat/catalog/index.html>). If more data is needed, we will use data from the National Center for Education Statistics (<https://nces.ed.gov/>) and the College Board Education Trends (<https://trends.collegeboard.org/home>).

Step	Estimated Time to Completion	Persons in charge
1. Data Collection and Extraction	1.5 weeks	Wade, Hong
2. Data analytics	1.5 weeks	Ningwei
3. Data visualization	1.5 weeks	Sixuan



