

- **Personal Statement:**

- (1) **Career goal:**

Being a senior manager in consumer marketing data analysis area is my goal after several years of working. I shall be leading, designing and implementing some research projects for marketing strategy and new bundle development then.

For now, I need to develop my programming skills, marketing sense and have the ability to deal with the classical problems in consumer marketing, like sales effectiveness analysis, consumer trends forecast, and new product pricing and marketing strategy, etc.

- (2) **How this project aligns with the goal:**

Most successful sales cases for a company are derived from the comparison with competitive products instead of totally innovation. So, it's important to understand the feature and pricing of similar products, as well as the relationship between each feature and their pricing. That will help to make our pricing more reasonable, which can lead to more profit.

In this context, I decided to use diamond data for analysis, because buying a diamond can be frustrating and expensive, since there are so many aspects to consider. Understanding this complex logic will definitely help me deal with general product pricing issues in the future.

- **Question**

- (1) **What factors affect the price of diamond? And which factor is the most influential one?**

The predictors: The shape, carat, color, cut (Facets, symmetry, and reflective qualities of a diamond), clarity, certificate or grading report, type (Natural or lab created).

- (2) **How flexible is the pricing of diamonds on the premise that they have the similar performance in all aspects?**

- **The data source:**

I download the data form URL: <https://www.kaggle.com/miguelcorraljr/brilliant-diamonds>

- **Proposed Time line of Work:**

Worklist	Date
Wrangling, EDA	11.5-11.12
Data Processing	11.13-11.16
Modeling and Validation	11.18-11.24
Write up	11.25-12.02