**Contact Information:**

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**Data Source:**

Kaggle.com: Historical NCAA data

**Introduction:**

We chose to use the data provided through Kaggle for a machine learning competition to predict the bracket of the 2018 NCAA basketball national championship. This problem is interesting because there are a lot of variables that go into sports competitions, including a lot of statistical data and random variables such as the human aspect. The challenge of putting an entire bracket together is particularly challenging, as things can change even from game to game. There is a large repository of data that can lend to helping predict likely outcomes, though, and it has become a popular pastime for people and groups to try their hands at predicting the likely final bracket.

We wanted to apply our machine learning knowledge to have a computer use all of the available data to come up with a bracket of its own, hopefully a fairly accurate one.

**Data Preparation:**

We were able to download our needed data from Kaggle.com easily enough, in csv form.

* + Describe the process of gathering, pre-processing, and otherwise preparing the data for analysis.
  + Include examples of why this dataset was non-trivial and how you overcame these challenges.

**Mining:**

* + Describe the process you used to mine the data, or learn patterns from it. What algorithms did you try, why did you try them? What parameters did you use and why?
  + Make sure to discuss different things you tried along the way, even if they resulted in dead ends.
  + Highlight challenges you faced and how you overcame them.

**Results:**

(insert sample of original data)

(insert sample of final data)

(insert chart of different algorithms used on data)

(insert chart of different options used with final algorithm on data)

(insert graph of iterations of final algorithm with final options on data)

* + Present the results that you obtained from the work done in the previous sections.
  + Include graphs and charts to support your findings. (Don't forget to include proper titles, axis labels, etc. for all graphs)

**Conclusions:**

* + Describe why your results could be of value to a business or stakeholder in your area. What would they know or what could they do differently as a result of your work.
  + Explain why your results constitute something "interesting."
  + Don't forget to discuss potential limitations or ethical issues.

L**essons Learned:**

* + What did you learn from this project?
  + What would you do differently if you could start this project again?