# **Final Capstone - Michael Jordan Performance**

I will be using an edited version of the Michael Jordan Career Regular Season Statistics by Game from 1985 to 2003. The original dataset is from <https://sports-statistics.com/sports-data/sports-data-sets-for-data-modeling-visualization-predictions-machine-learning/>. In my analysis I'm expecting to gain some insights into how Michael Jordan's performance varied in certain situations.

This version of the dataset contains 36,122 cells, 1072 rows, and 36 columns. The following are numeric data types: Id, Randbucket, EndYear, Rk, G, Years, Days, Age, Home, Win, Diff, Gs, MP, FG, FGA, FG\_PCT, 3P, 3PA, 3P\_PCT, FT, FTA, FT\_PCT, ORB, DRB, TRB, AST, STL, BLK, TOV, PF, PTS, GmSc. Leaving Buckets, Date, Tm, and Opp as strings. For this dataset, the identifier (Id) and, Randbucket and Buckets were generated in Excel to facilitate the A/A testing.

**The hypotheses I will be testing are the following:**

*- Hypothesis 1:*

*Ho: There is no statistically significant difference between game scores of overall games played by Michael Jordan.*

*Ha: There is a statistically significant difference between game scores of overall games played by Michael Jordan.*

*-Hypothesis 2:*

*Ho: There is no statistically significant difference between 3-point goal field shots made on the home field and as a visiting team while Michael Jordan played with the Chicago Bulls.*

*Ha: There is a statistically significant difference between 3-point goal field shots made on the home field and as a visiting team while Michael Jordan played with the Chicago Bulls.*

To prove those hypotheses I’m going to use the Python programming language to make an exploratory analysis and use the statistics library to run a t-test as well as plot graphs that support my story and findings. To test both hypotheses, I’m going to be using GmSc (game score) and 3P (3 points goal field shots) for each hypothesis respectively, which are continuous numeric data.

This research will be valuable to NBA aficionados and Michael Jordan’s fans. They will use the findings in this research to better inform themselves of Michael Jordan’s performance while playing with the Chicago Bulls as measured by his game score and 3-point goal field shots.