## CMPSC-380 Final Project Proposal

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### Research Question

What effects does the average height of an NBA team's starting lineup have on success?

#### Abstract

The goal of this research will be to determine the effect that the average height of an NBA team's lineup will have on the success of the team in that season. There is no question to the fact that being tall has a significant advantage when playing basketball, but how significant does this advantage effect the success of a team at the sport's highest level of competition? This research will analyze a sample of 5 NBA season from 2006-2007 season through the 2010-2011 season in order to identify some interesting trends focused around the starting lineup's average height. Some key points that will be focused on is how much height can effect a team's ability to make the playoffs, win championships, and simply regular season games. This research will also focus on identifying some interesting trends regarding the height of starters at specific positions on the roster. Though it is clear that there are more significant factors that go into how successful a team will be, such as how skilled a team's second team is, the number of all star players on the team, or the level of competition within a given team's division; it is still a very interesting concept to consider, and it is expected that several interesting trends will be identified.

### Description of Research

In order to complete this project, data must be collected on each team in the NBA, its performance in each of the seasons within the sample, and the height of the players that were in each team's starting lineup each year. The collection of this data should not be a difficult task, because sports statistics is very accessible data and is available to the public over numerous different websites. After the collection of data. a database must be constructed in order to easily manage and query the data. In order to successfully do this, several conceptual aspects of the database must first be thought out. After the database is constructed, the data can be analyzed in an attempt to find intersting trends between player height and team success. Given the results of these queries any identified trends can then be reported.

# List of Tasks

- Retrieve the relevant data
- Construct the database
- $\bullet\,$  Query the database to find relevant information
- Draft a comprehensive report of the results of the project
- Put together a presentation to summarize and key findings