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**Juan Mora\*** ([juan.mora@asu.edu](mailto:juan.mora@asu.edu)), 6902 W.Sheila Ln, Phoenix, AZ 85033, and **Armando Salinas**. *Basketball Simulation: Applying Data from the 2010 NBA Playoffs*.

Teams are a social structure that can be observed across numerous biological societies. Teams as a social structure can be observed within sports, and in particular Basketball. The 5 positions in basketball are widely recognized and accepted throughout the league, which means no single team deviates from having all 5 positions. This allows for position players to be unbiasedly compared to other position players across the league. Metrics to measure different variable operators were invented to measure the success of the team. Such metrics are discussed in Ambruster's (Basketball Teams as Strategic Networks. Ambruster was able to capture team dynamics through metrics such as degree centrality, clustering, entropy, and flow centrality. In the wake of the paper, Ambruster has a substantial amount of data to be analyzed, such as passes, shots taken, free throw successes, free throw failures, and more. Our task is to create a program that can simulate a basketball game by strictly using the probabilities of what a player will do with the ball at any given time. The program will be relatively successful if it can replicate most of the 2010 NBA playoff games. Implications of our program include evaluating a team member's worth and impact in the game. (Received September 16, 2014)