1077-G1-1417 **Andrew Larsen*** (andy@andylarsen.com) and **Kali Wickens**. *Beyond Regression: Using Learning Machines to Predict NBA Performance.*

Each year, NBA teams make million-dollar invest- ments by drafting collegiate and international prospects in the NBA draft; it is therefore critical to be able to predict the future performance of those players. While current prediction models rely on regression and other basic statistical techniques to make these predictions, the use of arti cial intelligence has not been explored in this context. Learning machines, a branch of arti cial intelli- gence, have shown marked improvement over their counterparts in making predictions in other elds, such as handwriting recognition, spam lters, and even movie ratings. To make predictions on the future success of NBA players, we utilize two types of learning ma- chines: support vector machines and decision trees. We train both the support vector machines and learning trees on collected data of past collegiate basketball players to create models which can then classify new players coming into the model. These machines make better predictions of player performance (Received September 19, 2011)