## **Detroit Tigers Baseball Analytics Questionnaire**

Return upload your responses to box using this <u>link</u>. If you have any issues or questions, please reach out to analyticsstaffing@tigers.com. Please adhere to the word limits and include your full name in all filenames.

- 1. Do you have any experience working with a sports team before? If so, please elaborate on your experiences especially any interactions with coaches or players. [250 words]
- 2. Please describe your experience with creating data visualizations and developing Shiny apps. Include any examples if you have them (they do not need to be baseball related). [250 words]
- 3. Please give a brief overview of your experience with predictive modeling as well as a description of an analytical project that you have completed. Include the purpose of the project, the methods or models chosen, any additional methods or models that were tested, and what tools or programming languages you used to complete the project. This project does not need to relate to baseball. [250 words]
- 4. What is a project that you believe would add substantial value to a baseball team? Please describe the project and provide an overview of how you would complete it. [250 words]
- 5. For Question 5, please refer to the table below. [150 words]
  - Players A, B, and C are available to acquire (for this exercise assume positions are inconsequential, they are all the same handedness, that they are the same age and of similar cost). Please rank them from the player you are most interested in, to least interested in. Explain your reasoning.

Player	Bat Speed 90th %ile (mph)	EV	LA	Squared Up Percentage	Vertical Attack Angle	On Plane Efficiency	Contact Depth (ft)
Player A	86.4	89.9	23.4°	63.8%	16.0°	62.1%	1.21
Player B	82.1	90.8	17.2°	68.4%	8.7°	61.3%	0.01
Player C	71.3	89.9	10.8°	74.5%	5.9°	66.1%	-0.18

- 6. You are provided with a CSV file named AnalyticsQuestionnaireHitData.csv, which contains hit-level data from a specific baseball game. Your task is to analyze this data and produce self-explanatory visualizations that summarize the group of hitters' results.
  - Your visualizations should aim to highlight key insights such as production on batted balls, batted ball spray, and other general approach tendencies. Please ensure that your visualizations are clear, informative, and easy to interpret for someone unfamiliar with the data.