Quantitative Analyst Applicant Project 2025

Thank you for your application to the Baltimore Ravens Player Personnel Department. We are asking a select group of applicants to complete this project before we continue in the hiring process. We understand your time constraints as professionals and/or students so please don't over-extend yourself in this process. We want to see your thought process and technical abilities. How do you think about data conceptually? Which modelling methods do you know? How do you typically test your accuracy and communicate your results? You will be evaluated on the practicality, creativity, novelty, and rigor of this research.

Project Overview

Using data from the 2025 NFL Big Data Bowl, choose any position (QBs, RBs, WRs, TEs, OLs, DLs, EDGE, ILBs, CBs, Safeties) and develop methods to evaluate a position-specific skill. For example, if you wanted to evaluate WR, you could investigate skills like playing speed, change of direction, hands, blocking, route running, or run after catch. We do not need you to build a comprehensive evaluation framework but focus on something specific and put your best work forward.

Steps

- 1. Agree to join the Kaggle competition at https://www.kaggle.com/competitions/nfl-big-data-bowl-2025/data.
 - a. You may need to create an account first.
- 2. Download all data.
 - a. When you are extracting the compressed file, it may take 8-10 minutes due to the large file size.
- 3. Use R, Python, etc. to investigate a position of your choice.
- 4. Write a 1-page executive summary that emphasizes the key takeaways to <u>non-technical stakeholders in the scouting department.</u>
 - a. If time permits, create a more technical document summarizing your methods and results.
 - i. Discuss your limitations and future extensions of your work.
- 5. Save your code and supporting documents to the OneDrive folder shared to you.
 - a. We should be able to run your code if we reference our local copy of the data files from Kaggle.