

Practicing Exploratory Data Analysis with Python



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Summary



Practice the acquired EDA knowledge to a real problem

Brief introduction to ideas related to course content to guide the initial steps towards insight search

Learn from others



Understanding the Problem



NFL Punt Analytics Competition

Challenge

Reduce occurrence of concussions by proposing specific rule modification

Evaluation

Efficacy and game integrity



Efficacy

**Demonstrate
understanding**

Easy to understand

**Reproducible
Analysis**



Game Integrity

**Is the proposal
actionable**

It can be applied

Risk

It does not introduce new
risks to player safety



Use data to propose
specific rule modifications
to reduce the occurrence of
concussions during punt
plays.



Hypothesis Examples

Faster players are more prone to concussions

Shorter players are more prone to concussions

Concussions occur the most at the end of games

There is no need to change the rules of the game

