

Quantifying Controversy: An Interview with Lucas Olmeta and Ben Kras

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Lucas Olmeta '28



Ben Kras '28

When the Ballon d'Or announced French soccer player Ousmane Dembélé as its 2025 winner, fans around the world expressed their surprise. Among the many questioning this decision, two curious WashU students, who had noticed the Ballon d'Or's repeated controversies, decided to find out for themselves who the true winner should have been.

Lucas Olmeta, a sophomore double-majoring in Data Science and Finance, and Ben Kras, a sophomore majoring in Data Science, are close friends. Both grew up watching soccer, developing a love for the sport. The pair had also eyed the field of data science for a while. Kras applied to WashU for Data Science, explaining that "it's always kind of been on my radar."

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Lucas Olmeta '28

Olmeta was inspired by his older brother, who studied data science in college. Olmeta explained that "he told me a lot about it...he shared his projects with me—that was really cool. So, I was sort of interested in it in high school as well." Having been exposed to data science for quite some time, it was only natural that the pair would find this unique way to tackle the controversy of the Ballon d'Or.

As Olmeta listened to his friends' arguments regarding the controversy, he decided to find the answer for himself. Once he gathered the data, he invited Kras to

help with the analysis. Olmeta added, "I think it was the first time that me and Ben together have done a project, so that was sort of a really cool experience. Especially doing something related to soccer was really fun for us because we're such big fans." Kras also shared his enthusiasm for the project, explaining that "I haven't worked with very interesting data sets up until pretty recently just because I've been doing a lot of foundational statistics classes... But I think there's always just been an innate curiosity about the potential for these kinds of applications."

With enthusiasm and skill, the two began the project, though developing it was no easy task. The goal of the project was to analyze quantitative data from previous Ballon d'Or awards as well as various player statistics and awards. The two approached this problem in different ways.

Olmeta took several player metrics and compared them to previous award winners. Meanwhile, Kras developed a model to predict vote shares. He explained that the Ballon d'Or went to the player with the most points, which are based on votes from prestigious magazines. The goal of the model was to accurately predict the percentage of total votes that a player receives and rank players accordingly.

As they developed their respective techniques, they faced numerous challenges. Olmeta pointed to the difficulties in actually attaining the data, since much of it was locked behind a paywall. After gathering what he could, he then had to figure out how to quantify similarities between players and previous winners.

For Kras, a major problem was the small sample size he had due to the limited number of Ballon d'Or nominees from only the past four years. This is when the techniques he learned in class became useful. Kras used ridge regression to shrink the co-

efficients to a size where results would be more accurate, preventing overfitting from the small sample size. He also used a technique called bootstrapping, which is a method that resamples the data to estimate how stable or reliable the results are, making the data easier to work with.

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Ben Kras '28

After working through their challenges, Kras's model predicted the first few winners with surprising accuracy, although the model was unable to rank the remaining nominees accurately. Olmeta found similar results, finding Dembélé to be ranked high among several metrics. After compiling their results, to the surprise of both, it seemed that Dembélé was the statistically favored player to win the award.

Throughout the project, Kras and Olmeta enjoyed applying their skills in a fun and innovative way. In discussing an idea about data science that should be more well-known, Kras said, "If you frame an issue correctly, it probably can be solved or at least thoroughly investigated with data science," which is a principle that proved itself through their project.

They both plan to continue in the field well into the future. Olmeta is looking to possibly become a data scientist or work in sports analytics. Both look forward to pursuing passion projects in their future. ■