

Admissions Under the Microscope: Did COVID-19 Change College Applications Forever?

You're a data science analyst at a major university consulting firm. Your client wants to know: How has the college admissions landscape truly shifted over the last decade? Specifically, they've heard rumors that standardized testing (SAT/ACT) is dying, and "holistic" criteria like essays and recommendations are gaining importance, especially after the COVID-19 pandemic. They need a statistically rigorous answer to inform their strategy.

We have your data: You'll work with the U.S. Department of Education's IPEDS data on hundreds of universities from 2014 to 2023. Your mission is to use logistic regression to separate general trends from the *specific shift* caused by the pandemic.

- **Scenario:** You need to quantify the "COVID-shift effect" on admissions criteria.
- **Your Mission:** Build a model to predict whether a university uses a specific admissions criterion (e.g., requires the SAT) based on the year and institutional characteristics (like public/private status and region).
- **The Deliverable:** You will produce a final analysis report that includes a validated logit regression model with an Area Under the ROC Curve (AUC) greater than 0.75, and visualizations that clearly show the statistically significant shifts in admissions factors that occurred after 2020.

Begin your analysis here: <https://github.com/Ceerogreen/DS4002CS3>