

Proposal 1: College Football AP Poll Predictor

Problem Statement

The Associated Press (AP) Top 25 poll is one of the most influential ranking systems in U.S. college sports, shaping media narratives, playoff debates, and fan discussions. Yet, the weekly shifts in rankings often seem subjective and spark heated debates. Fans frequently ask: *why did one team move up while another stayed flat, despite both winning?*

Our guiding question is:

“How do weekly game outcomes (win/loss, margin of victory, and opponent rank) influence changes in a team’s AP Poll ranking?”

This question is clear (focused on measurable variables), measurable (ranking movement can be compared directly against game data), and reasonable (historical AP poll data and game stats are widely available). Answering it provides transparency to fans and creates a structured way to analyze poll movement.

Data Preference

- **Dataset Sources:**
 - Data scraped from ESPN College Football Rankings and Schedule pages (https://www.espn.com/college-football/fpi/_/view/resume/season/{year}) and https://www.espn.com/college-football/team/schedule/_/id/{team}
 -  College Football Rankings 2020 to 2024 (Historical data)
 -  College Football Rankings 2025 (Current data)
- **Dataset Documentation:**  **CFB Variable Description**

Explanation

We will build a **Streamlit web app** that lets users:

- Explore AP Poll ranking history through interactive charts.
- Simulate “what-if” game outcomes (e.g., *What if #12 beats #3 by 14 points?*).
- Predict next week’s rankings using machine learning models (logistic regression, random forest, or Elo-style rating system).

Value:

- For fans: Transparency and a fun engagement tool to see how performance drives rankings.
- For analysts: A structured way to test assumptions about poll behavior.
- For education: Demonstrates how predictive modeling works in a familiar, high-interest domain