Logistic regression assumptions and diagnostics

Recap: IRLS for logistic regression

Leverage and Cook's Distance in logistic regression

Class activity

https://sta712-f22.github.io/class_activities/ca_lecture_7.html

- Generate data with a potentially influential point
- Explore leverage and Cook's distance

Variance inflation factors for logistic regression

Addressing model issues

How should we handle each of the following issues in a fitted model?

- Violations of the shape assumption
- An influential point with high Cook's distance
- High multicollinearity in the explanatory variables

Discuss with your neighbor for 3--5 minutes, then we will discuss as a group.