9.5: Inference in Logistic Regression

Topic 9.5: Inference in Logistic Regression

Read Section 13.2.4 of your textbook. As you read, take notes on the following.

1 What distribution does the test statistic from a likelihood ratio test follow?

2 What are the three tests for goodness of fit?

3 What is the goodness of fit of the logistic regression model testing? What distribution does the test statistic follow?

4 How do we test hypotheses on a subset of the model parameters? What distribution does the test statistic follow?

5 How do we test an individual coefficient? What distribution does the test statistic follow?

6 How do we construct a confidence interval for a regression coefficient? What is the interpretation of the confidence interval when it does not contain 0? How do we interpret the confidence interval in terms of odds ratio?

7 How do we test if all the coefficients are 0? What distribution does the test statistic follow?

Read section 1 of the file below to see how confidence intervals for logistic regression coefficients are interpreted. Read section 2 for a recap of the various likelihood ratio tests in logistic regression.

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　　Confidence Intervals and Hypothesis Testing in Logistic Regression