Poisson Regression

INFO 370

Learning Objectives

Review the Poisson **distribution**

Identify good candidates for **Poisson modeling**

Understand the **structure** of a Poisson model

Be able to **interpret** and **evaluate** results of a Poisson model

Implement a Poisson model in R (nb-4)

Part 1: Reading

Reading

Read the poisson.pdf file in nb-4, and discuss the following questions:

- What are the **parameters** of a Poisson distribution?
- Be able to **provide an example** of an event that is Poisson distributed.
- What is the **structure** of the Poisson formula (i.e., what is on each side of the equation)?
- What **assumptions** should you check before running a Poisson model? What are alternatives if these assumptions are not met?
- Be able to **clearly interpret** a beta value from a Poisson model (describe a beta value of .3)
- What goodness of fit test can we use to evaluate a Poisson model?

Part 1: implementation

nb-set-4

Upcoming...

r3-modeling due ***Tuesday before class*** (cannot be turned in late)

Notebook4 due **Friday night**

Next Week

- Logistic regression + assignment 3