Lecture 16

Recap: quasi-likelihood methods

Recap: quasi-Poisson

When to use quasi-Poisson models

- The response is a count variable
- The Poisson shape assumption looks good
- The response has more variability than a Poisson distribution accounts for
- We believe variance is a multiple of the mean

Estimating the dispersion parameter

Mean deviance estimate

Pearson estimate

Distribution of the estimates

Inference with quasi-Poisson models

Class activity

https://sta712-f23.github.io/class_activities/ca_lecture_16.html