Investigating Homelessness from a Local Shelter's Perspective through Data Analysis

What: **Bi-State Colloquium** When: **Tuesday, October 30, 4:45pm** Where: **Loras College, Hennessy 250** Who: **Molly Walkner**

The Opening Doors Teresa Shelter in Dubuque, Iowa, provided data regarding client information to Loras College for the purposes of exploration. Primarily, our analysis focused on searching for significant factors that impact both length of stay and re-entry, described as repeated stays at the shelter by an individual client. We explored these variables through a variety of classification and prediction models, with an emphasis on the Naïve Bayes Classifier. To improve our understanding of the application of the Naïve Bayes Classifier, we learned about the mathematical concepts underlying this model. Through of our analysis, we discovered several statistically significant findings that may impact shelter policies and processes.

Molly Walkner is a senior math major at Loras. This presentation is in partial fulfillment of the Loras College mathematics major.