## Colloquium Series



The Department of Mathematics at Knox College is proud to welcome Knox College student

## Kit Piepkorn

Candidate for a major in Data Science. The title of his talk is

## Predicting Through the Lens: A Look at Recommendation Systems

Streaming services are constantly looking for ways to increase their viewer interaction with their system. One of the primary ways that these companies (e.g. Netflix, Hulu etc.) accomplish this, is through the use of recommendation systems. These systems take existing user data, and through the use of machine learning algorithms, determine a user's preferences.

This paper examines applications of Content-Based and Collaborative filtering systems, primarily through the use of similarity matrices and matrix factorization. These systems will be trained and tested on the MovieLens dataset.

The goal of this research is to test several models in order to achieve the best level of accuracy and prediction when estimating a user's preferences and future viewing needs. Finally, I will discuss the results to show the effectiveness of fitting and training a model with Content-Based and Collaborative Filtering algorithms in order to increase user interaction within a streaming service.

Where: SMC A-206

**When**: Friday, May 19, 2023

4:00 - 4:45 pm