Jazzmin Duncan
Captone in Data Science

Topic

For the duration of my Capstone project, I will work with Professor Joti Rockwell and Concert Production Manager Audrey Dunne to explore the factors that influence student attendance at concerts hosted by the music department, utilizing a combination of historical data and real-time data collection. I am analyzing 15 years of past attendance logs to identify patterns over time, including how events like COVID-19 affected participation. I'm also looking at how different types of concerts -- such as student performances, faculty recitals, or guest artist events -- draw different audiences. To connect these trends to broader campus life, I'll incorporate data on student demographics, academic calendars, and other campus events, which may impact whether students choose to attend. In the present phase of the project, I am collecting new data through student surveys and social media analytics. I'm especially interested in what motivates students to attend a concert—such as knowing a performer—or what prevents them from going, like scheduling conflicts or lack of information. Ultimately, the project aims to provide data-informed strategies to increase concert attendance and improve the student concert-going experience.

For the future phase of the project, I aim to use insights from both the historical data analysis and the present-day data collection to develop actionable strategies that can improve and predict concert attendance moving forward. To support this, I will examine how different types of post-concert feedback (e.g., surveys, short responses, rating scales) can be used to collect ongoing, qualitative insights into students' experiences, which can then be used to improve programming and outreach. In addition, I hope to expand the dataset by identifying new variables that could be tracked in the long term—such as whether students are music majors, how often they attend campus events in general, or their engagement with music outside of class. Ideally, the project will culminate in the creation of a predictive model that estimates attendance for future concerts based on known factors like historical trends, social media engagement metrics, and the timing of other campus activities.