# Parking Patterns and Penalties: Analyzing Student Decision-Making in Campus Parking

## Introduction

Affan's research examines why students at the campus sometimes choose to park in restricted residential areas, leading to parking tickets. By analyzing data on parking habits, ticket distribution, and student choices, Affan identified patterns that explain when and why these violations occur. Affan developed a model that predicts parking behavior using tools like chi-square tests and decision trees. This research helps to understand students' parking challenges better and offers insights into how campus parking policies might be improved.

## Faculty Voice

"Seeing our economic students apply data analysis and modeling to real-world problems has been a pleasure"

-- James Kemper

## Team

**Faculty**: James Kemper, Victoria Hang, Latchezar Popov

**Students**: Affan Anas

## Goals of our Project

For Affan's project, our primary goal was to understand the factors influencing student parking behavior on campus and develop a model to help predict when and why students choose to park in restricted areas. We aimed to achieve a measurable outcome by creating a decision tree based on data analysis, which Affan successfully developed. This model provided insights into parking patterns and offered practical recommendations for improving campus parking policies.

## Student Voice

"This project has been transformative for me as an aspiring economist. Applying economic concepts to real-life situations, without clear answers, challenged me to think critically. Gaining proficiency in statistical software like R-studio and prioritizing meaningful contributions over personal gain has deepened my passion for economics and shaped my professional identity."

-- Affan Anas

## To Date Progress

Affan learned to appreciate the data collection and refining aspects of research while applying various data analysis techniques, such as chi-squared tests and decision trees, to solve a real-world problem. Additionally, Affan took the initiative in scheduling meetings and keeping the team updated on the project's progress.

TrUE Transformers

My Top 3 Transformative Priorities

Support more than one undergraduate

Draw in new faculty

Support more than one undergraduate student