

A Study on Bike Share Analysis

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Abstract: *This study explores the role of bike-sharing programs within urban mobility and the potential impacts of autonomous vehicles (AVs) on cyclists' safety perceptions and behaviour. The research focuses on analysing factors that influence the adoption of bike-sharing services, including safety perceptions, AV technology familiarity, and demographic characteristics. Using tools like MS Excel and statistical models such as multiple regression and logistic regression, the study examines patterns in bike-sharing usage, public attitudes toward AVs, and the implications of AV testing on public streets. Findings suggest that factors like age, perceived safety, and AV familiarity significantly influence bike-sharing behaviour. The study recommends enhanced infrastructure, integration with public transit, and data-driven insights to improve bike-sharing systems and promote safer interactions with AVs.*

Keywords: Bike-sharing, Autonomous vehicles, Urban mobility, Safety perception, Regression analysis, Data analytics, Public transit integration, Cycling infrastructure