

## Preface

A multidimensional sector of the economy, tourism significantly impacts the social, cultural, and economic development of nations and areas worldwide. Its importance cannot be emphasised, especially in developing countries where it is a significant source of employment and income. The benefits of tourism go far beyond monetary gain; they also include economic development, cross-cultural interaction, and environmental protection.

In this project, we explore Goa's tourism industry, a state in southwest India known as the "land of sand, sun, and sea." Goa has become one of the most popular travel destinations in the nation thanks to its magnificent scenery, particularly its unspoiled beaches. In this paper, we discuss our research on analysing the trends and practises of Goan tourism using two different methodologies. First, we conduct exploratory data analysis on extensive data to learn more about the distribution and behaviour of tourists across various variables. We use deep learning models, specifically LSTM and BiLSTM, to anticipate tourism flow at the taluka level for multivariate time series forecasting. We also use sentiment analysis to forecast ratings based on opinions about Goa. Due to the subjectivity of human judgement, manually rating each sentiment and assigning scores becomes impracticable, making automation of this procedure essential for rapid analysis.