

Attendance Prediction Based on Weather Condition

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Abstract:

Since the early beginnings of education systems, attendance has always played a crucial role in student success, as well as in the overall interest of the matter. The most productive way of increasing the student attendance rate is to understand why it decreases, try to predict when it is going to happen, and act on causing factors in order to prevent it. Many benefits of predicted and increased attendance rate can be achieved, including better lecture organization (i.e., lecture time and duration, lecture class choice, etc.). This project describes the steps in the extraction of knowledge from the university's student database and making a model that predicts whether the student will attend the class or not based on weather. In this project attendance patterns are reflected using a Harr cascade algorithm.

Keywords—Weather Forecast, Attendance Prediction, Machine Learning, Face Detection, Convolutional Neural Network, Tensor Flow.

I. INTRODUCTION

Weather forecasting is the application of science and technology to predict the state of the atmosphere for a given location and current location based on the data of estimated rainfall. Ancient weather forecasting methods usually relied on observed patterns of events, also termed pattern recognition. It might be observed that if the sunset was particularly red, the following day often brought fair weather. This includes temperature, rain, cloudiness, wind speed, and humidity. However, not all of these predictions prove reliable. Weather warnings are a special kind of short-range forecast carried out for the protection of human life. Weather warnings are issued by governments throughout the world for all kinds of threatening weather events including tropical storms and tropical cyclones depending upon the location distinguishing a specific group

of entities i.e., Face. It has numerous applications, such as education, surveillance, and so on. This paper presents a simplified approach to serve the above purpose using the basic Machine Learning (ML) packages such as TensorFlow, Keras, OpenCV and Scikit-Learn

II. RELATED WORK

In face detection method, a face is detected from an image that has several attributes in it. According to research into face detection requires expression recognition, face tracking, and pose estimation. Given a solitary image, the challenge is to identify the face from the picture. Face detection is a difficult task because the faces change in size, shape, color, etc. and they are not immutable. It becomes a laborious job for opaque image by some other thing not confronting camera, and so forth.