Patent Search

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Abstract:

MACHINE LEARNING BASED HYBRID MODELS FOR ACCURATE FLIGHT DELAY PROPAGATION PREDICTION A method of treating the approach entails employing a first p model to process a first plurality of features from the set of features in order to calculate the expected time delay of the given aircraft flight's departure time from the airport. On the basis of a characteristic key parameter set for describing delay propagation, a randomly chosen airport pair is chosen as the research object, and all d to the airport pair is extracted from various existing data sets. A deep learning algorithm is then used to establish a flight delay prediction model based on an artificia network. Prediction of the flight's arrival and departure times is involved in the delays. The approach in this case classifies input information pertaining to an airline's network, airport data, and various airline reference data. The technique entails anticipating the necessary corrective modifications that an aircraft's flight managemer need to make in order to maintain a reference trajectory. FIG.1

Complete Specification

Description:MACHINE LEARNING BASED HYBRID MODELS FOR ACCURATE FLIGHT DELAY PROPAGATION PREDICTION

BACKGROUND

Technical Field

[0001] The embodiments herein generally relate to a machine learning based hybrid models for accurate flight delay propagation prediction.

Description of the Related Art

[0002] A method of any delay in an aircraft's scheduled arrival or departure time will have a ripple effect that causes delays for other users of the runway and gat were scheduled to use those facilities during the delayed arrival and/or departure times, as well as for the next route that the aircraft and/or crew are needed to op As the civil aviation business expands quickly, so do aviation needs, and the problems of airport network air traffic jams and flight delays are becoming more critica purpose of making an accurate forecast, a condition for retrieval is determined by a condition-determining section. Using the retrieval condition, a prediction sectio forecasts a location. Flight time prediction is the practice of anticipating a flight delay at a predetermined level. It is used in civil aviation. The anticipated flight delay take into account the anticipated time of arrival (ETA), anticipated time of departure (ETD), as well as airline procedures such aircraft taxi-in and taxi-out. The objecti each aircraft due to enter the airspace regulated and managed by the air traffic controller should be understood by the controller in order for air traffic control and to work effectively

View Application Status