A Predictive Analysis of Time Spent in Airport Arrivals in US

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Topic

We want to understand airport arrival wait patterns by predicting future flight arrival times, the likelihood of delays and the time spent waiting in customs/passport control. We want to get all flight arrivals and custom wait times from Chicago O'Hare Airport from the last month. We predict roughly . To do so, we will use:

1. A Form API of wait times for customs from international flights arriving into Chicago O'Hare, one of the major US airports.

   - https://awt.cbp.gov/

2. A REST API of historical flight arrivals data

   - https://rapidapi.com/oag-oag-default/api/flight-info-api Endpoint: GET /status - Get flight status by specifying arrival date range and arrivals airport

Our motivation for pursuing this problem is our experiences with international travel. We understand the stress of making connections and wasting time walking around new airports during travel.

Significance

This research problem is significant as oftentimes, flights take longer than expected or airports have unexpected delays. We want to be able to minimize wasted time in the airport and understand the likelihood of making a connecting flight based on historical flight data from a number of different airports.

When flying internationally into the United States, this information can be very useful to help plan one's travel. Based on their predicted total flight time, travelers can select connecting flights that minimize wasted time waiting around in the airport and allow for adequate times between flights. This prediction information will also help travelers decide what time to book taxis or hire cars, or decide which airlines and airports to avoid at different times because of unreliability.