

Abstract

Systems and methods for allocation of a driver to a passenger by receiving a request for a ride from a passenger's computing device; identifying a set of candidate drivers for the ride based on location information in the request; determining, using a safety evaluation model, a ride safety score for each driver in the set of candidate drivers based on the driver's records and the passenger's records; determining a ride operational efficiency metric for each driver in the set of candidate drivers; allocating, using an allocation model, a designated driver to the passenger based on the ride safety score and the ride operational efficiency metric.

Figure 4