

This thesis explores demand-responsive transport, where vehicles pick up and drop off passengers based on individual requests. We present a model of the Dial-A-Ride Problem (DARP), which uses real road networks from OpenStreetMaps. Customers ask for rides between two locations, providing their preferred departure time. The goal is to minimize both the operating cost and the customer waiting time. We implement three different encodings of an individual for genetic algorithms and three Ant Colony Optimization frameworks. We compare the results of these algorithms on our custom generated datasets.