

ABSTRACT

A method for controlling traffic lights is provided. The method may include obtaining historical track data of a plurality of vehicles. The method may include obtaining a congestion period. The method may include determining a discharge speed during the congestion period based on a portion of the historical track data corresponding to the congestion period. The method may further include determining an offset value based on a length of the road, the discharge speed, a cycle length of a first traffic light at the downstream intersection, a cycle length of a second traffic light at the upstream intersection, and a time length of a green light of the second traffic light being lit, and determining a signal timing of the second traffic light based on the offset value.

(FIG. 9)