Networks and Markets

Hw2 submission

Part 5: Experimental Evaluations

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9. We think the most logical thing would be to define the value on the edge between rider and driver as:  
if that value is positive, otherwise the value will be .  
That's because it seems that in an exchange network setting, it's reasonable to view the value on the edge between rider and driver as the value driver has for rider 's ride and can capture that value because the driver will get paid for giving that ride, however, the driver will have to travel from his location to the rider's location and then from that location to the rider's destination, which decreases his revenue by a function of the distance travelled (because it wastes fuel and time.) , this also decreases rider 's value for the match due to time wastage.  
The reason we added that zero evaluation when is negative is [this discussion on the forums.](https://moodle.tau.ac.il/mod/forum/discuss.php?d=96767)

11. We can multiply a rider's value, , by a factor, , and replace a rider's value by .  
 should be a function of the rider's location and destination, perhaps a sum , where is determined by the rider's location and is determined by the rider's destination. will reflect how popular are the rider's location and destination, for example, if the driver is heading to an airport will be big, and if he's heading to a derelict suburb, will be small, will behave similarly.  
That way, when a rider is heading to or located at a location that is popular among drivers, the value on his edges in the exchange network would be higher, that way, he'll be more likely to get a match and a higher price.