**Optimasi Durasi Lampu Lalu Lintas pada Persimpangan di Kota Jember**

*Optimization of Traffic Light Duration at Crossroad in the Jember City*

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## ABSTRACT

*Jember regency is one of the regencies in East Java Province. Jember is one of the destination to contuining education so make this country have increasing of population. With increasing density of the population, problem will arise, one of which is traffic jam. One of the centers of traffic jam at a crossroad. The problem of conventional traffic lights at crossroad makes it unable to adapt to the current vehicle volume conditions. So the use of fixed time cause problems such as traffic jams, because between quiet and busy lanes are given the same time. Researcher are trying to create simulation system can optimize the duration of traffic lights with three parameter, vehicle volume, road area and the length of the traffic queue. The result of simulation system to make optimize duration of traffic light using Fuzzy Mamdani found the average value obtained for the system being develop 3,94 from User Acceptance Testing (UAT) using questionnaire.*

*Key words: Jember, Crossroad, Traffic Jam, Fuzzy Mamdani, UAT*