# **SIMULASI PENERAPAN ANFIS PADA SISTEM LAMPU LALU LINTAS ENAM RUAS**

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***Abstract***

*The traffic light system aims to control the flow of traffic at an intersection. Arrangement the duration of green lights on every section can be done either statically or dynamically. The right duration arrangement not just can be proved by the smooth flow of traffic but also the waiting time of the vehicles that are not too long at the intersection. This research was conducted to compare the average of waiting time between static method arrangement and dynamic method arrangement using ANFIS at the six-way intersection. Research data are based on field observations of the average arrival time of vehicles, the average time when vehicle passes the segment of intersection, and duration of green lights on each segment of intersection. Then the data are processed using simulation software to obtain the static method result. The next step, ANFIS system is added to the software routine to determine the duration of green lights based on the condition of the other segments in order to obtain the dynamic method results. The result showed that the dynamic method using ANFIS can provide 20,24% more optimal result than the static method that is applied today.*

*Key words: traffic light systems, Neuro-Fuzzy, ANFIS.*