

ABSTRACT

PINTU OTOMATIS BERBASIS FINGERPRINT MENGGUNAKAN METODA FUZZY LOGIC

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Nowadays, many companies and offices still using manual entrance door. Eventhough some companies have used fingerprint automatic door, but haven't calculate on the speed of motion object towards the door yet. In order to the door move directly proportional with the speed of motion object, then fuzzy logic method going to be used. This fuzzy logic method will determine error value of distance and Δ error value of distance. From the result of error and Δ error, minimal α -predicate from each rule going to be calculate and then the result of α -predicate will be multiply with the value of z_i . The multiplication result will be divide with α -predicate to get defuzzification of crisp output. The result on monitor serial, research result using matlab and manual method calculation will bear comparison to each other, and then the error value of instrument can be obtained. Using matlab instrument 0,14% of error value is noted, using monitor serial is 0,07%, and the manual calculation's error value is 0,07%.

Key words : fingerprint, fuzzy logic method.