ANALYSIS OF ACCURACY ALGORITHM FUZZY INFERENCE SYSTEM TSUKAMOTO AND MAMDANI USING CROSS VALIDATION ALGORITHM

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ABSTRACT

The Informatics Study Program, University of Technology Yogyakarta has several concentrations of specialization, namely SCR (Smart System) and WEM (Web Mobile). Each student has their own inclinations, abilities, interests, and thinking abilities that affect the concentration of specialization. According to the Regulation of the Minister of Education and Culture No. 49 of 2014 concerning the national standard of higher education requires a maximum of 5 years of study period for students for undergraduate programs (S1). Concentration selection errors have an effect on the student learning process which can reduce student interest in learning and are at risk of not graduating on time. To assist students in determining the choice of specialization concentration, a decision support system was formed using a fuzzy algorithm that will help determine the concentration of specialization that should be taken. Accurate decision support system results are needed to minimize errors. So that the best fuzzy algorithm is found in the case of determining the concentration of interest.

Keywords: Fuzzy Tsukamoto, Fuzzy Mamdani, Concentration, Comparison