An Intuitionistic Fuzzy Methodology for Component-Based Software Reliability Optimization

Component-based software development is the current methodology facilitating agility in project management, software reuse in design and implementation, promoting quality and productivity, and increasing the reliability and performability. This paper illustrates the usage of intuitionistic fuzzy degree approach in modelling the quality of entities in imprecise software reliability computing in order to optimize management results. Intuitionistic fuzzy optimization algorithms are proposed to be used for complex software systems reliability optimization under various constraints.

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