研发、设计、测试

基于模糊综合评价的软件测试性度量

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摘要　　考虑软件测试性和测试性特性的模糊性，提出一个基于模糊综合评价的软件测试性度量方法。方法分为模糊度量测试性特性和模糊度量软件测试性两个阶段，每个阶段都基本遵循经典的模糊综合评价方法，分为建立因素集、确定评价集、单因素评价、确定权重和综合评价。为了准确度量软件测试性，方法将测试性特性度量得到的模糊综合评价值作为软件测试性度量的输入。方法不仅能判断软件测试性和测试性特性等级，还能计算它们的具体数值，很好地削弱了模糊性对软件测试性度量的影响。

关键词　　软件测试性　测试性特性　模糊综合评价

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Software testability measurement based on fuzzy comprehensive evaluation

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Abstract

Considering the fuzziness of software testability and testability characters，a measurement method based on fuzzy comprehensive evaluation is proposed.Two stages are included：one is the fuzzy measurement of the testability characters and the other is the fuzzy measurement of the software testability.Similar to the traditional fuzzy comprehensive evaluation method each stage includes five steps：establishing the factor set，determining the evaluation set，single factor evaluation，determining the weigh vector and comprehensive evaluation.To measure the software testability precisely the fuzzy comprehensive evaluation values of the testability characters are taken as the inputs to the software testability measurement.The method can not only determine the ranks of the software testability and testability characters but also get their numerical values.It can eliminate the impact of the fuzziness to software testability measurement.

Key words　software testability　testability character　fuzzy comprehensive evaluation

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