Software Engineering Seminar (SS 2014)

Software Reliability Prediction

Description

Reliability is one of the most important attributes of software — especially for safety-critical ones. Determining the reliability of a component during the development phase provides an important insight of how reliable it will be during the operation even before it is finished or deployed. There exists a number of reliability prediction techniques that can be employed to determine reliability of an individual component. However, when the components are integrated into a larger system, the complexity of the architecture poses a problem for the prediction of the system’s overall reliability. The fault tolerance techniques, such as, redundancy, rejuvenation, or fault masking, help increase the system reliability while, at the same time, complicate the prediction. This seminar topic should investigate the approaches and techniques which can be used for software reliability prediction.

References


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