Software Engineering Seminar (SS 2014)

Runtime Software Fault Localization

Description

Identifying the root cause of a specific problem in a large system is a difficult and time-consuming task due to its complexity. When a problem occurs, it is usually visible and can be detected as unexpected outputs at the component or system boundary. However, this information alone is not sufficient for the diagnosis. Fault localization is a method which narrows down the areas that might be the root cause of the problem. When applied in an automatic manner, fault localization can reduce the effort for manual examination and provide valuable information to a failure prevention module so that the problem can be avoided at runtime. This seminar topic should investigate the approaches and techniques which can be used for runtime software fault localization.

References


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