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### Reliability Prediction and Estimation of a Safety Critical System Using Airs .

**G . Chitra Devi**

Abstract - Literature review revealed that software is an essential part of many critical and noncritical applications , and virtually any industry is dependent on computers for their basic functioning . Techniques to measure and ensure reliability of hardware have seen rapid advances , leaving software as the bottleneck in achieving overall system reliability . Hence there rises a situation for the developers to develop high quality software . Having that in mind it is necessary to provide the reliability of the software to the developers before it is shipped . This can be achieved based on immune system . The immune system classifies the corrected data and error , also the error data are further classified into four different data sets . Then the error rate is measured from the data sets . This will produce high quality reliable results over a wide variety of problems compared to a range of other approaches , without the need of expert fine-tuning.