

Description of Work

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Abstract

Software Development is usually based on requirements. The larger the developed system, the harder it is to analyze and verify it. This article shows how it can be done automatically. Our contribution consists of two parts: (I) an artificial neural network, with a set of successful formal descriptions received from human-readable version of requirements and their formal description to learn the models of correctly implemented requirements; (II) a checker, which analyzes requirements' formal description and semantics, obtained by semantically analyzing the source code. The proposed solution checks if written code meets the requirements or not. In the end it makes a suggestion how to fix a code.