Semantic model for language objects in automation of critical software certification

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Research results of synthesis of the generalized model for semantic integrity kernel for software standards of texts and technical documentation processing automation are presented. Application of this model as a part of the computerized dialogue decision making support system at systems with intensive software use certification will provide the increase in overall performance by the certified auditor at the expense of lowering in routine work when forming a normative profile on software, and also risks reduction of incorrect decisions acceptance in software technical documentation text analysis. Linguistic basics for semantic modeling of software standards and technical documentation language is given. Formal representation of the generalized model in semantic integrity kernel of language objects for 'Software normative base and technical documentation' is provided.

Keywords: *software, software expertise, normative base, normative profile, syntactic analysis, semantic information, text compression, set of keywords, semantic integrity kernel.*

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