Metric of Vulnerability at the Base of the Life Cycle of Software Representations

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Abstract—This article investigates the problem of the origin of software vulnerabilities in terms of their life cycle. For this purpose, the process of creating a software by a person is examined in detail and partially formalized with in philosophical categories — «Form vs Essence». There is proposed main representations of life cycle and intermediate stages of the transformation between it. As an example, there's hypothetical comparison of two software transformations with a graphical interpretation of the security level of each of final representations. This article is a author's works continuation on the fundamental research of the security problems of the software domain.

Keyword— information safety, machine code, software representation, vulnerability, methodology, metric, life cycle

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