

## **ANALYSIS OF SOFTWARE VULNERABILITY DETECTION METHODS**

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**Abstract.** The author proposes a direction of improvement of existing software protection systems, focusing efforts on increasing their ability to detect new types of malware. The most promising direction for the development of technologies for detecting vulnerabilities and vulnerabilities in software is an approach that combines different methods of analysis. This allows achieving higher accuracy of the results, as well as increasing the productivity of the tools used to check the code. A method of combining static analysis of programs and dynamic symbolic execution is proposed to improve the accuracy of vulnerability detection while maintaining high performance of analysis tools. This approach will significantly reduce the risk of errors that can be missed when using one of the analysis methods separately, and also improves the efficiency of the overall software security process.

**Keywords:** analysis; antivirus solution; cybersecurity; malware; method