

UC researchers improve security of open source software

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A group of researchers from the College of Science and Technology of the University of Coimbra, that form Dognædis, a start up specialist in information security, developed a technology that allows to detect and correct, in real time, security problems on software.

It is called CodeV (Verification Code) and it is defined as a sort of «intelligent inspector-professor that detects security problems on software throughout all of its development phases, fires alerts, produces reports and gives instructions towards the fast correction of identified problems, meaning, it is a computer security expert», explains Francisco Rente, UC's researcher and executive director of Dognædis.

On tests conducted over the 40 largest free software existent on the market, namely on applications used by the Portuguese State, Francisco Rente says that CodeV identified 28 vulnerabilities of the zero-day kind, i.e., security problems unknown until this date. «These 28 vulnerabilities will be publicly disclosed but in a responsible fashion, ensuring they aren't used with malicious ends before there is a solution available», assures the researcher.

When compared to other applications of the sort, CodeV sets apart by the fact that it is a system that faces computer security as a continuous and holistic process. Francisco Rente explains that the software is gifted with «intelligent algorithms that use a very high level of knowledge and logic that allows the detection of a wide range of problems, such as database violation with criminal ends, authentication systems intrusion, amongst other

anomalies».

On the other hand, the technological solution developed in Coimbra gives a Quality Certificate to companies that develop software. Francisco Rente says that this way it is possible to fight the pricing problem of some dedicated software and give assurance to the clients that they are buying a safe computer program.

«More control by responsible teams when developing a software and a significant increase of companies efficacy» are some of the other gains of CodeV marked by Francisco Rente. According to the researcher, the software is ready to enter the commercial circuit. But for now « a simple version of the technology will be made available for free by Dognædis », advances the executive director of the start up.

Translation from the original.