

CHAPTER 59

TECHNOLOGY COMPUTER SCIENCE & ENGINEERING

Doctoral Theses

626. GUPTA (Anand)
Context Honeypot.
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Abstract

It has addressed the problem of designing a honeypot system in a database scenario that attempts to confirm/ reject the suspicion (apriori raised by external stimuli) over a suspected user (partial information about him known apriori), who might violate the privacy by masking himself with an authorization parameter for a malafide intention (in a pre-event scenario). Such a honeypot has been termed as "Context Honeypot". Suitable characteristics have been identified to meet its objective and their necessity explained with suitable examples. Opaqueness is one of these important characteristics. Needful parameters that can measure the opaqueness property of the context honeypot have been identified, and quantitative and qualitative measurements for opaqueness have been proposed and illustrated with the experimental results. It has also been shown how these parameters can be used iteratively in designing a credible synthetic information, before it is put into operation.

Contents

1. Introduction. 2. Literature review of honeypots in information technology. 3. Design of context honeypot. 4. Opaqueness characteristic of context honeypot. 5. Framework for measurement of opaqueness for standerization of synthetic information. 6. Conclusions and future work. Bibliography and Appendix.