

## 1. Automatically Locating Malicious Packages in Piggybacked Android Apps

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**Abstract:** To devise efficient approaches and tools for detecting malicious packages in the Android ecosystem, researchers are increasingly required to have a deep understanding of malware. There is thus a need to provide a framework for dissecting malware and locating malicious program fragments within app code in order to build a comprehensive dataset of malicious samples. Towards addressing this need, we propose in this work a tool-based approach called HookRanker, which provides ranked lists of potentially malicious packages based on the way malware behaviour code is triggered. With experiments on a ground truth set of piggybacked apps, we are able to automatically locate the malicious packages from piggybacked Android apps with an accuracy of 83.6% in verifying the top five reported items. (0 refs)

**Inspection controlled terms:** invasive software - mobile computing - smart phones - software tools - source code (software)

**Uncontrolled terms:** malware behaviour code - HookRanker - tool-based approach - piggybacked Android apps - malicious packages detection

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