

MemPerf

C/C++ Programming

yes

<https://dev.to/bauripalash/how-to-run-c-programs-on-android-3cco>

<https://www.quora.com/Is-there-an-app-to-run-a-C-program-in-an-Android-mobile>

<https://frameboxxindore.com/android/how-can-i-install-c-program-in-my-android-phone.html>

Malloc/Free Interception

rdtscp()

yes, using alternative assembly implementation

<https://stackoverflow.com/questions/40454157/is-there-an-equivalent-instruction-to-rdtsc-in-arm/40455065>

<https://stackoverflow.com/questions/37683416/dlsym-undefined-symbol-android-n>

dlsym

work for public .so file

<https://developer.android.com/training/articles/perf-jni>

http://www.mulliner.org/android/feed/binaryinstrumentationandroid_mulliner_summercon12.pdf

PMU Sampling/Counting

yes if has the event type

<https://android.googlesource.com/platform/prebuilts/simpleperf+/refs/heads/ndk-r13-release/README.md>

Thread Interception

yes

https://github.com/xiaokanghub/Android-Anti-AntiTrace/blob/master/Hook%20pthread_create

Lock/System Call Interception

Leak Detection

/proc/self/maps

yes

<https://sayfer.io/blog/dynamic-loading-in-android-applications-with-proc-maps/>

Backtrace

use alternative implementation

<https://stackoverflow.com/questions/8115192/android-ndk-getting-the-backtrace>