



Prof. R. Wattenhofer

Are Phone Manufacturers Cheating, or Just Lazy?

When a manufacturer launches a new phone, especially if it is a flagship, they perform many optimisations to ensure high performance. A newly launched phone almost always performs very well in daily usage and in synthetic benchmarks. However, after some time, when manufacturers shift their focus to the next generation, the current flagships get neglected.

They might still receive some software updates, but the main optimization effort is put into the upcoming flagship, which can lead to sudden decreases in performance when upgrading to a new Android version. Many people even think that manufacturers make older phones slower on purpose, in order to force users to upgrade to the newest phones. While this might be hard to prove, it would already be interesting to find the best/worst manufacturers.



In this thesis we want to develop a performance test suite consisting of Android apps (including open-source Apps from GitHub) that measure different aspects of synthetic and real-world performance. The test suite should then be used on phones of different manufacturers (possibly emulated) to detect performance regressions between devices and operating system versions. If this sounds interesting to you, do not hesitate to contact us so we can have a chat!

Requirements: Creativity and programming skills are an advantage. The student(s) should be able to work independently!

Interested? Please contact us for more details!

Contacts

- Gino Brunner: gino.brunner@tik.ee.ethz.ch, ETZ G63
- Simon Tanner: simon.tanner@tik.ee.ethz.ch, ETZ G97