



Prof. R. Wattenhofer

Real-World Android Performance Benchmarking

Many factors can influence the performance of our smartphones. Most of them can be summarized under a few main causes: CPU load, RAM usage, network and disk speed. The effects of these causes can be very different. A high overall CPU load might cause general sluggishness, like stutters during scrolling. A constantly high RAM usage can cause the OS to remove apps from memory faster, thus increasing the average app launch times. Slow network speeds might also cause apps to launch faster, but only if content is being loaded before they are displayed.

In this project we want to study how these metrics relate to different real-world performance metrics as perceived by the users in daily usage, such as app launch times or animation fluency. The goal is to get a thorough understanding of the interplay between these factors, and maybe even have a look beneath, e.g., investigating what the causes are for high CPU load. 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. Interest in Android and Data mining/analysis. The student(s) should be able to work independently!

Interested? Please contact us for more details!

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