Prof. R. Wattenhofer

Extremely Professional Android Phone Benchmarker

When buying a new phone, many people want to make sure that their money is well spent. One part of this is to check out results of artificial benchmark tests like AnTuTu, Geekbench and PCMark. While these benchmarks are able to rank phones based on their scores, it is unclear what those scores actually mean in terms of real-world performance, which is what we are actually interested in when making our buying decision.

After our success with DiscoMark, we wanted to create a more powerful tool for professional reviewers to measure the (real-world) performance of Android phones. Google's update to Android 7.0 broke several standard benchmarking tools used by reviewers. So, we thought this would be the perfect time to fill this gap.

The goal of this thesis will be to continue the development of our professional benchmarking tool and promote its use among professionals. Our tool is a multi-platform desktop application coded in Python. The project is very well structured and documented, and it was designed for maintainability and extendability. Therefore, it will be easy to get right to work without having to spend weeks familiarizing yourself with opaque code. If this sounds interesting to you, do not hesitate to contact us so we can talk about the project in more detail.

You will: Learn more about Android and its debugging/monitoring/instrumentation tools. Continue development of our tool in Python. Come up with new ways of measuring (real-world) performance. Improve your data visualization and analysis skills, and so on. In addition, you will meet with your supervisors on a weekly basis to discuss progress and open problems.

Contacts

- Pascal Bissig: bissigp@tik.ee.ethz.ch, ETZ G95

- Gino Brunner: gino.brunner@tik.ee.ethz.ch, ETZ G63