

Estimating Android Applications' CPU Energy Usage via Bytecode Profiling

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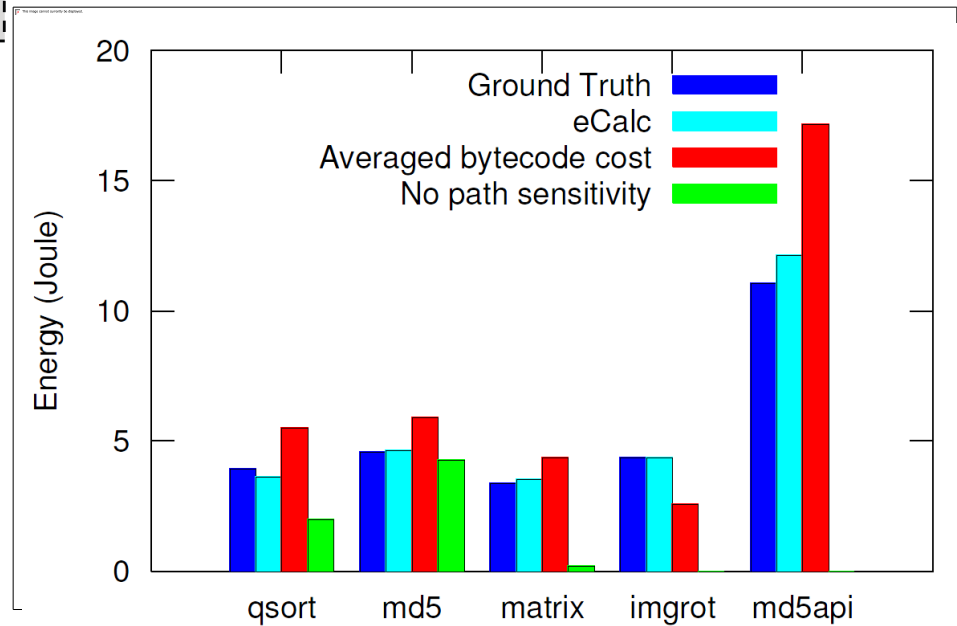
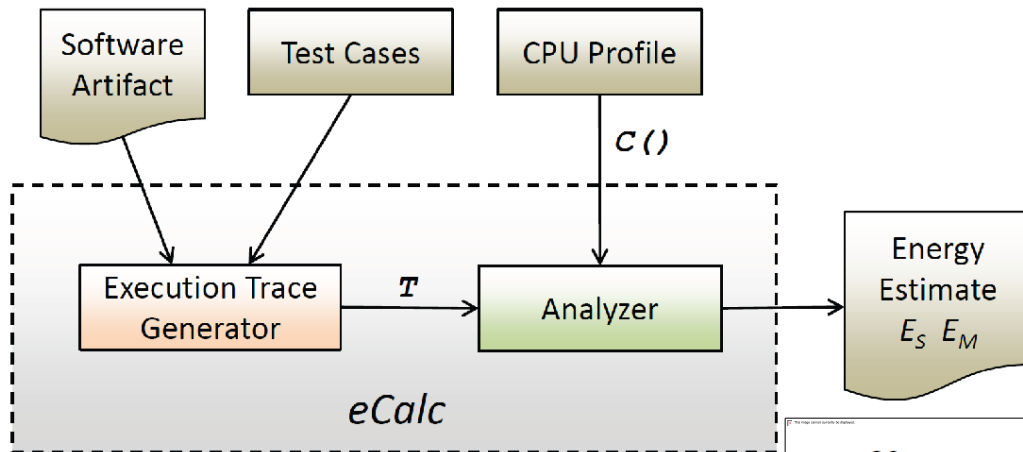
The Message

- Goal: Optimize energy efficiency of implementation
- Important to focus on software implementation
- Current techniques inadequately support developers in optimization

The Issues

- Power monitors
- Many diverse components
- Static imprecision
- Level of granularity
- Speed of feedback
- Combinations of hardware/OS
- Extensive use of system libraries

eCalc



The Questions

1. What information does an app developer need to make informed energy optimizations?
2. What is the best way to prove the usefulness of such approaches?