Locy: Energy-efficient sensing with Android smartphones.

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Introduction

- Phone sensing may be utilized by mobile applications to provide **advanced services** such as navigation systems.


- **Phone sensing** fetches raw sensor data (e.g. from an accelerometer) and tries to extract high-level information from it (e.g. a user is walking).

- Such a process may have **high energy demands**, which is crucially important to mobile phone users.

- Energy-efficient phone sensing vs Tristan's results? or maybe HOW (what approach) ?!
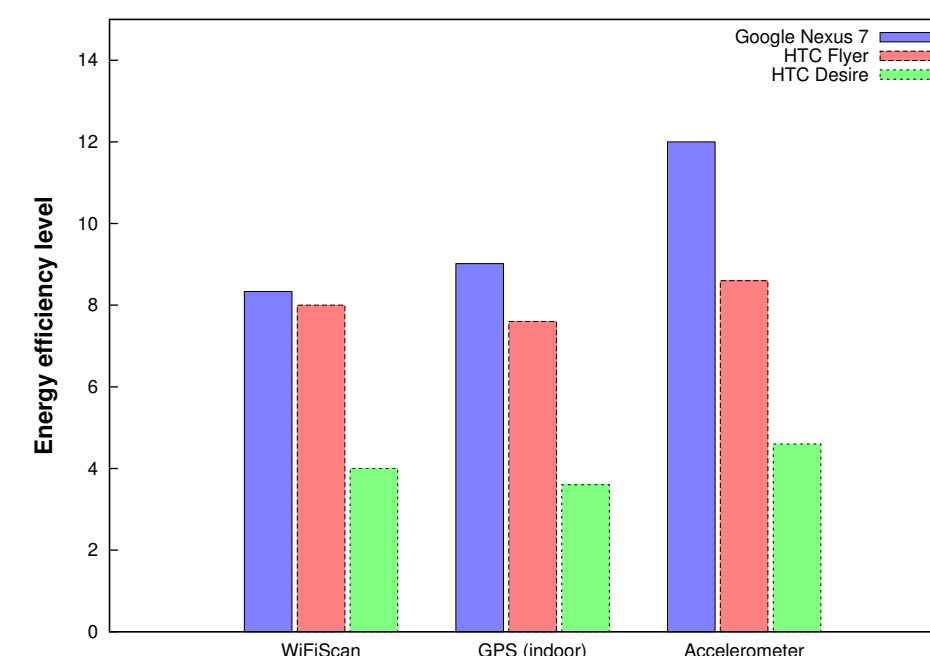

Solution

- different energy efficiency levels across devices [GRAPH the difference]
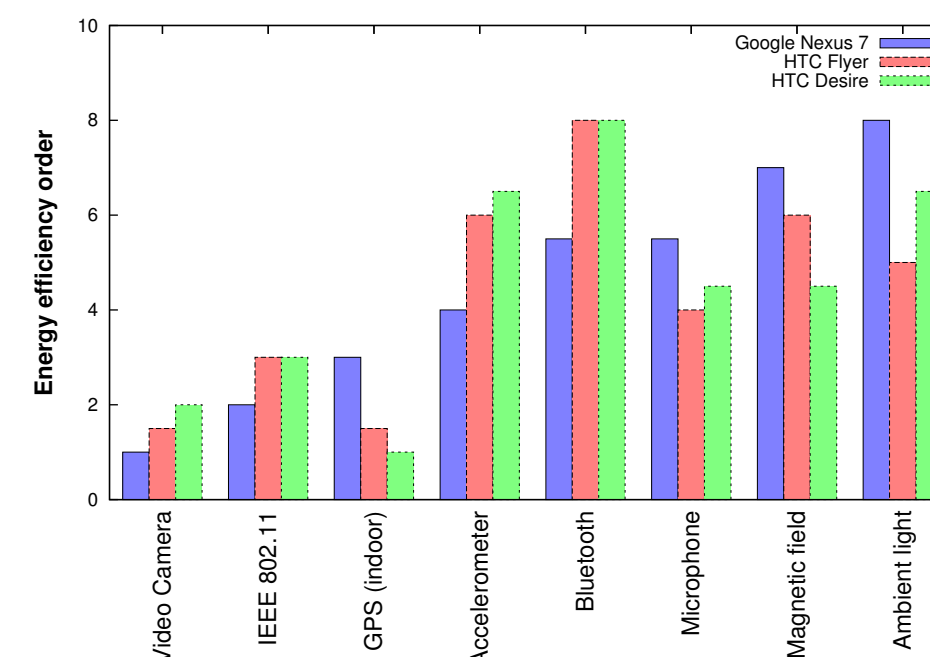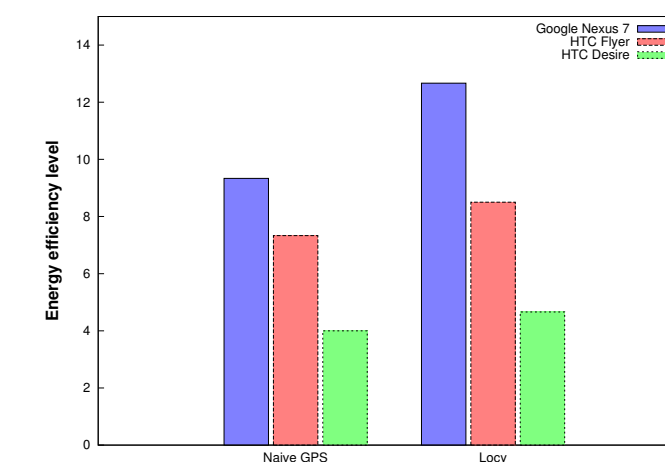

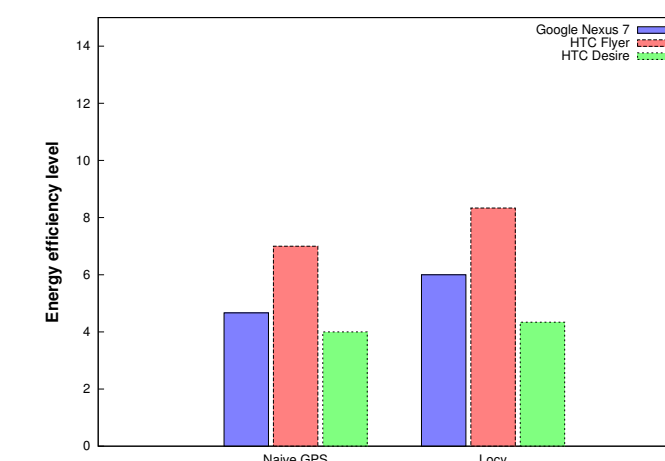- however, accelerometer always better than others [GRAPH accelerometer]

- movement detection which leverages energy-efficient accelerometer to switch off GPS [MAYBE GRAPH]

- duty-cycling + adaptive towards the battery life

Evaluation

- scenario I [GRAPH]

- scenario II [GRAPH]

Conclusions

What does it mean? [GIF HAPPY FACE + mobile phone + full battery]