Operating Systems Design: Critique

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- **Power provisioning for a warehouse-sized computer**

  The paper suggests that power management analysis is still lacking in computer systems such as warehouse-sized datacenters. Even with a single large computer system, it's a huge economic difference for a data center.

  The advantage of this paper is that the first analysis of data center size power management as a real workload. And the analysis is model-based, making it easy to apply as a cornerstone of other research or to design a real data center.

  However, I am currently curious about the paper published in 2007, so whether the analysis in 2007 is still valid. Furthermore, the recent rise in machine learning may also help to find new models.

- **Where is the energy spent inside my app? Fine Grained Energy Accounting on Smartphones with Eprof**

  Energy use is an important issue as applications operate on small devices (smartphones). The paper proposes a new fine-grained power usage profiling tool *eprof* to address power management system. This is not easy work because they need to analyze power consumption at various granularity, consider numerous hardware, and make connection power consumption with application.

  The advantage of this paper is that it presented a new profiling tool, which not only analyzed 21 applications, but also presented a power management expression called bundle. This helps the analysis even when other applications are not mentioned in the paper.

  It is expected that the power management analysis method and bundle of this paper can be used for energy use analysis in systems other than mobile.