

and EOPTA). We showed that, for the two applications, optimizing for performance alone led to significant reduction in energy. However, optimizing for energy alone caused major degradation in performance. We also demonstrated the efficiency of ALEPH. Based on our study, we propose collective use of the Pareto-optimal front and paths of POPTA and EOPTA as optimization guide for design of optimization algorithms for performance and energy.

The software implementations of the algorithms presented in this paper can be downloaded from the location, <https://git.ucd.ie/manumachu/aleph>.

In our future work, we would find and study applications and platforms where optimization of energy would lead to improvements in performance. We would also focus on bi-objective optimization problems for performance and energy on heterogeneous parallel platforms.

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