

Seminar

Mult-Agent Reinforcement Learning for Multicore Processors

Reducing the power consumption of multicore processors is an ongoing and challenging task for processor designers. Many different machine learning algorithms (Reinforcement learning (RL), supervised learning, unsupervised learning) have been proposed to manage power and performance of multicore processors. Especially, RL has been widely used for DVFS, DPM and DTM. However, the interaction of multiple RL algorithms, e.g. RL-1 managing DVFS and RL-2 managing DPM, is an open research area. In this seminar, you will identify state-of-the-art RL algorithms for DVFS, DPM and DTM and investigate if there are any Multi-Agent-RL algorithms for multicore power/thermal management.

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