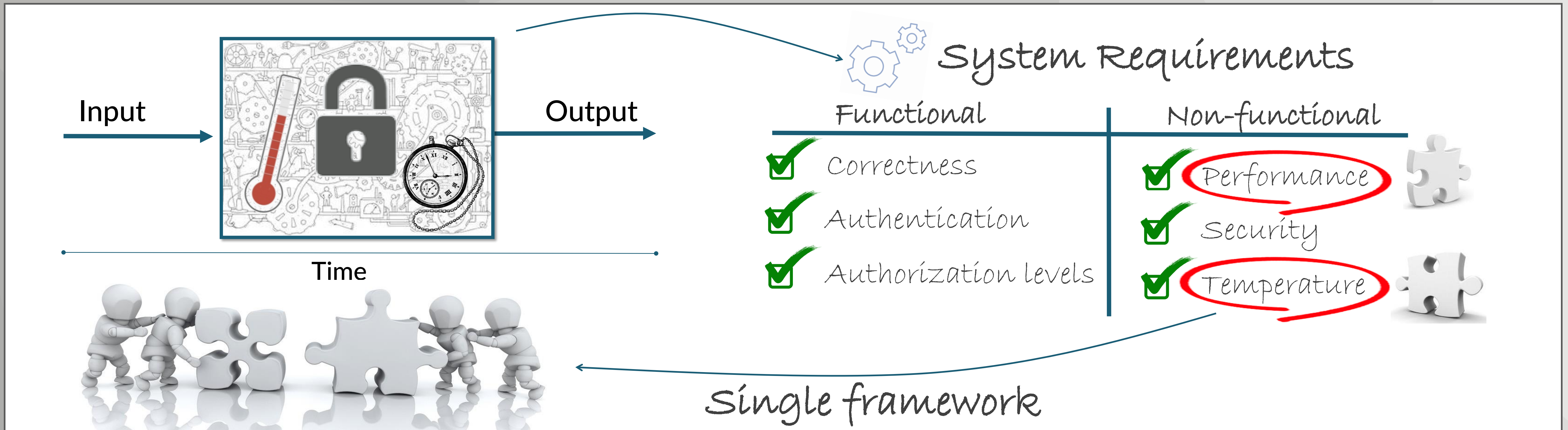
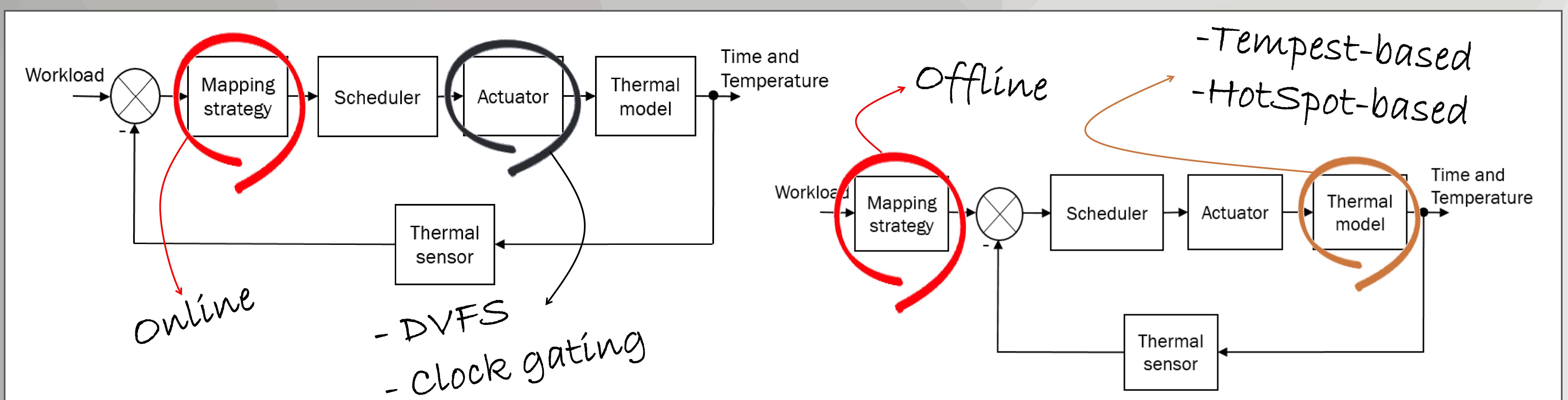


Towards Robust and Cost-Effective Critical Real-Time Systems under Thermal-Aware Design

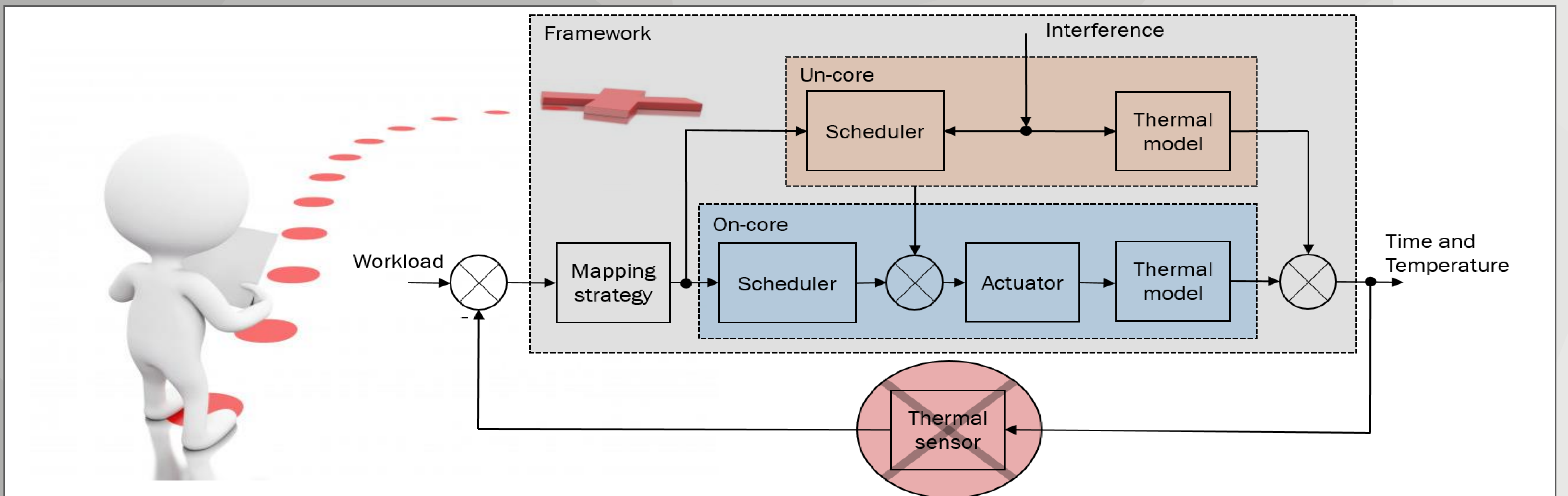
Motivation



State-of-the-Art



Proposed Approach



Concluding Remarks

1. Need to revisit the task-to-core mapping strategies available in the literature in order to take into account the thermal profile of each task.
2. Need to adopt a per-core analysis and build a unique “correct-by-construction” framework wherein we model both the temporal and thermal “on-core” and “un-core” activities for each processing element.
3. Need to derive an analysis that predicts the runtime behavior of the entire system without any need of a feedback loop.

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