ECEC-412/621

Project 4: Implementing Cache Replacement Policy and evaluating its performance using AI Workloads

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1 PC-Signature-based Hit Predictor

1. Recent research (*Section 3.2* of Supplement One) suggests that the reuse behavior of a cache block is strongly correlated with the PC that inserted it into the cache. Read through *Supplement One* and design a cache replacement policy based on the PC-Signature-based Hit Predictor.
2. Evaluate your cache replacement policy using all the AI workloads and compare against LRU and LFU.

2 Submission

1. Report how you design the cache replacement policy with a diagram and pseudo-code.
2. Summarize the experiment in Section 1.
3. Compile above all in a single PDF file.
4. All source codes.
5. Zip above all and submit through Bblearn.