

Back to the Future: Leveraging Belady's Algorithm for Improved Cache Replacement - ISCA 2016 -

Alceu Emanuel Bissoto - 191077

Algoritmo OPT

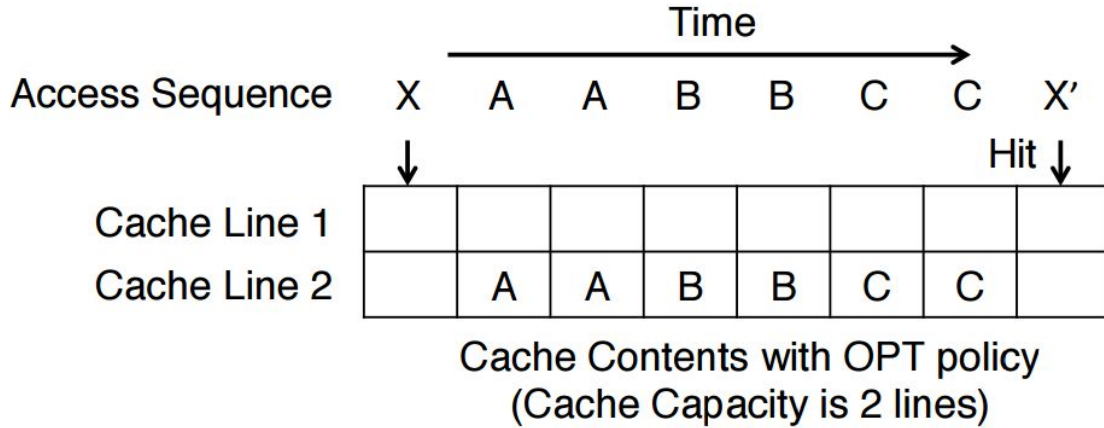
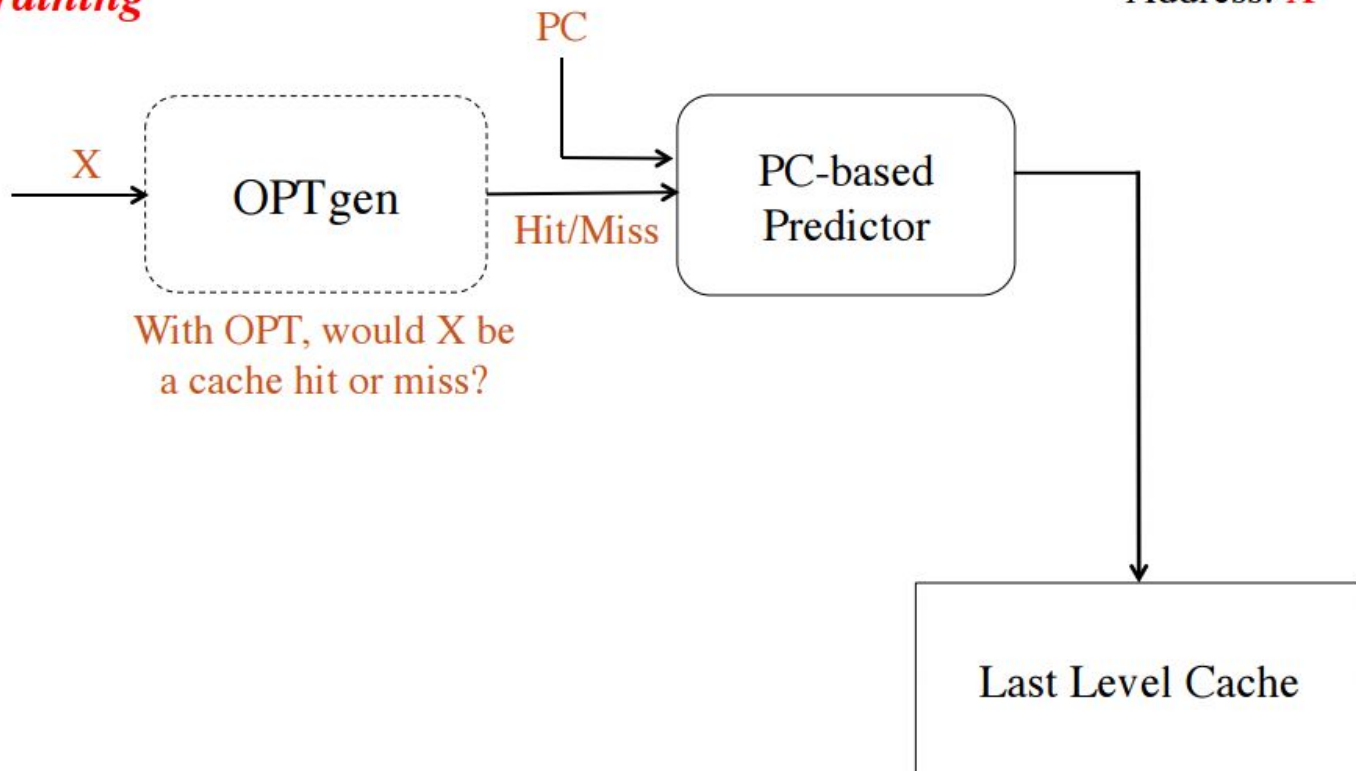


Figure 5: Intuition behind OPTgen.

Hawkeye: Overall Design

Training

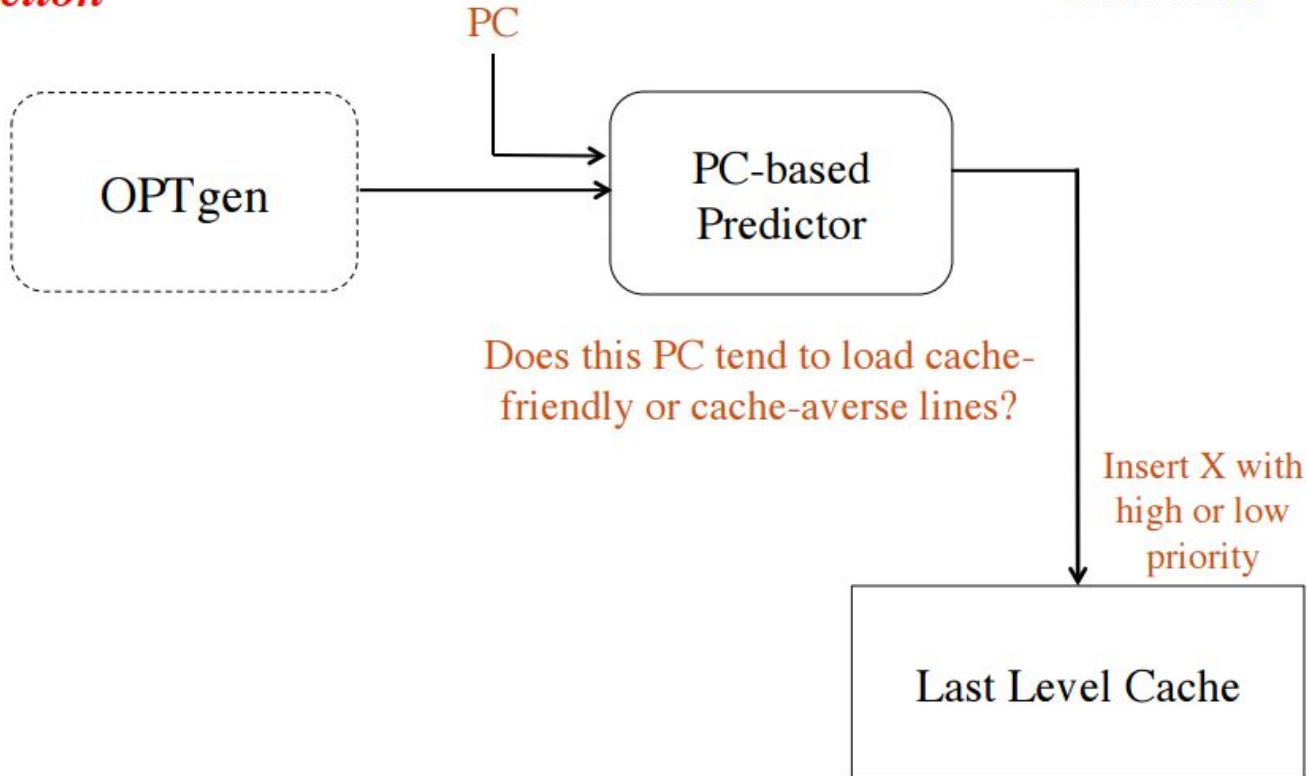
Address: **X**



Hawkeye: Overall Design

Prediction

Address: **X**



Projeto 4

- Fases de treinamento e predição.
- Adição da análise do PC.
- Caso o dado que foi retirado da cache tenha baixa prioridade de ser retirado, então o último PC que acessou esta via de cache é treinado negativamente.

Resultado Artigo

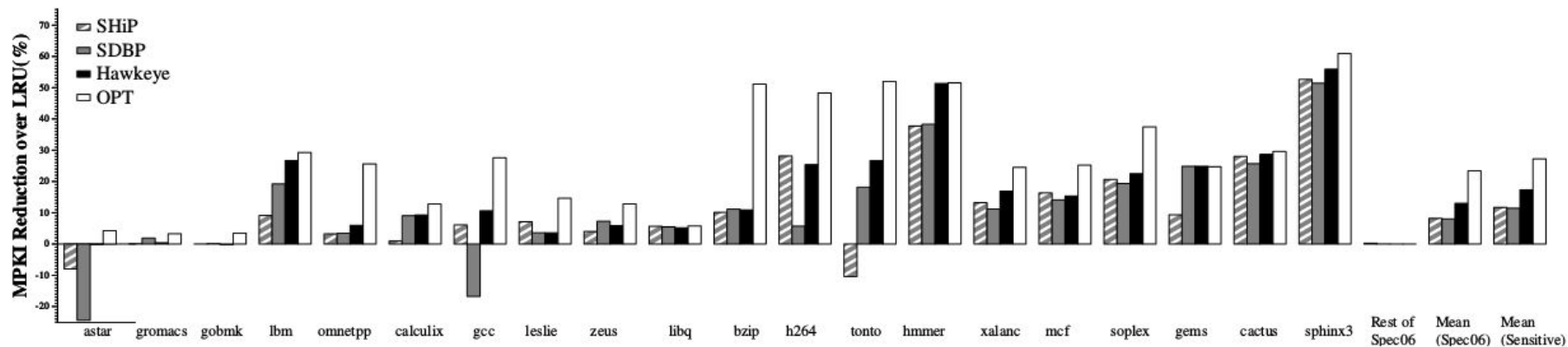
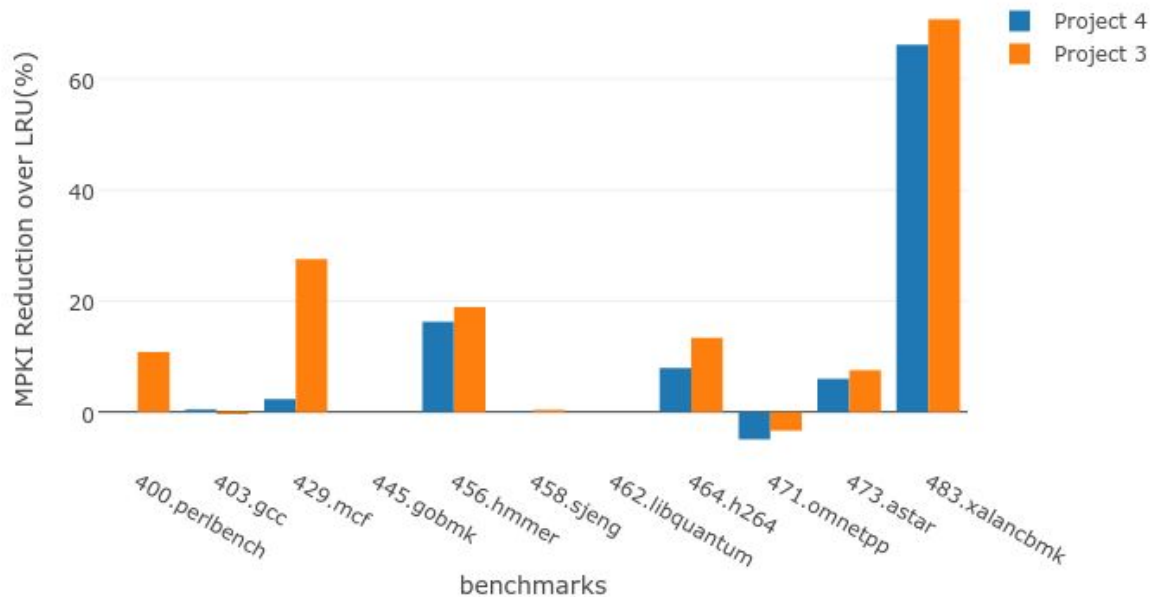


Figure 8: Miss rate reduction for all SPEC CPU 2006 benchmarks.⁴

Comparação projeto 3 x 4

Hawkeye x LRU



Referências

<https://www.cs.utexas.edu/~lin/papers/isca16.pdf>

<http://isca2016.eecs.umich.edu/wp-content/uploads/2016/07/2A-1.pdf>