

Prefetch cache line suggested
by the base prefetcher

Perceptron Filter

1. Inferencing

2. Recording

4. Training

3. Retrieving

Features Recorded in
Table

Index 1	Index N

Update
Weights

Subsequent Demand
Hit / Eviction

Sent for L2C / LLC for
Prefetch

FEAT 1
W_{11}
W_{21}
W_{31}
W_{41}
W_{I1}

FEAT 2
W_{12}
W_{22}
W_{J2}

FEAT N
W_{1N}
W_{2N}
W_{3N}
W_{KN}

Sum

Thresholding