ECEC-412/621

Project 2: Implementing a perceptron-based branch predictor and evaluating its performance using ML workloads.

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1 Perceptron-based Branch Predictor

1. Read through *Supplement One* and implement a perceptron-based branch predictor.

2. Evaluate your branch predictor with the AI workloads and find out the best performing configurations.

3. Compare your branch predictor against the two-bit local, tournament and gShare predictor. Does the perceptron-based branch predictor out-perform them?

2 Submission

1. Report how you design the perceptron-based branch predictor with a diagram and pseudo-code.

2. Summarize the experiment in Section 1.

3. Compile all the above information in a single PDF file.

4. Cleaned source codes.

5. Zip above all and submit through Bblearn.