

Branch Prediction Championship CSE6421 Fall 2017

Setting Up the Simulation Infrastructure:

1. Download the BPC kit:
bpc6421AU17.zip (~500M) and save it in your home directory.
2. Unpack the kit:
gunzip bpc6421AU17.zip
cd bpc6421AU17
3. There should be four directories: sim, scripts, traces, and results
4. The sim directory contains the simulator.

```
cd sim  
make  
./predictor ../traces/SHORT-INT-1.cbp4.gz
```

5. The scripts directory contains scripts that can help you run your predictor for all traces. Check out the doit.sh file in the scripts directory.

```
cd ../scripts  
./doit.sh
```

6. We will use the AMEAN over all traces as the figure of merit. You can compute this using the getdata.pl script. Usage is as follows.

```
./getdata.pl -d ../results/GSHARE*
```

7. The traces directory contains 20 traces: 10 short traces (~30 million instructions) derived from CBP-1 and 10 long traces(~150 million instructions) derived from SPEC 2006.

Writing Your Own Branch Predictor:

In your sim directory, there are two files you can modify: **predictor.cc** and **predictor.h**

Only these two files should be submitted with your contest submission.

Any changes you make to any other files will not be reflected in our simulator.