

CJPEG: compress an image file to a JPEG file

benchmark: http://www.dii.unisi.it/~mondelli/didattica/benchmark_cjpeg.tar.gz

	Cache Configuration A	Cache Configuration B
L1cache size	1 kB	32 kB
Main Memory latency	24	100

Configuration

1 - download and install cotson (only if it is not already installed)

2 - download benchmark_cjpeg.tar.gz from website

\$ wget http://www.dii.unisi.it/~mondelli/didattica/benchmark_cjpeg.tar.gz

3 - go in cotson examples directory

\$ cd /home/<user>/<cotson_dir>/src/examples

4 - unpack benchmark_cjpeg.tar.gz

\$ tar xvzf benchmark_cjpeg.tar.gz

Simulation

5 - Run simulation

\$ make run_<simulation_name>

where <simulation_name> can be:

- cjpeg_benchmark_small_memoryA : cache configuration A and input small
- cjpeg_benchmark_small_memoryB : cache configuration B and input small
- cjpeg_benchmark_large_memoryA : cache configuration A and input large
- cjpeg_benchmark_large_memoryB : cache configuration B and input large

Example:

\$ make run_cjpeg_benchmark_small_memoryA

Verification

6 - You can check if your jpeg files are same as files inside expected_output

Statistics

7 - For each simulation, you can analyze statistics file:

- node.1.heartbeat_small-memoryA.log : cache configuration A and input small
- node.1.heartbeat_small-memoryB.log : cache configuration B and input small
- node.1.heartbeat_large-memoryA.log : cache configuration A and input large
- node.1.heartbeat_large-memoryB.log : cache configuration B and input large