

Criterion	Score (0-5 or N/A)	Confidence (0-3)	Comments	
Algorithm [1]	5	3	Using RELU non-linearity, but notes that this is out of the norm but Nair and Hinton as using this method	
Program [2]	N/A	0		
Compilation [3]	5	3	In a linked reference to the model, there is information on required libs and how to compile	
Transformations [4]	N/A	0		
Binary [5]	N/A	0		
Model [6]	4	2	Model was heavily detailed, but no reference if the trained model is available	
Data set [7]	3	2	Trained and tested on subsets of ImageNet but no information about how to obtain/use dataset.	
Run-time environment [8]	0	3	No information given on runtime environment	
Hardware [9]	5	3	Outlined architecture with 1 and 2 gpus, including model of gpu, memory, and cross-communication between gpus	
Run-time state [10]	N/A	0		
Execution [11]	4	2	manual adjustment of learning rate, trained 90 epochs which took 5-6 days on 2 NVIDIA GTX 580 3GB GPUS	
Metrics [12]	5	2	top1 and top5 error rates given	
Output [13]	N/A	0	The output was just the error rates after entering the model in different competitions	
Experiments [14]	N/A	0		
Required disk space [15]	2	2	The model is said to fit in the 2 gpu memory (6GB total) but it isn't stated how much memory is required for ImageNet or ImageNet subset used	
Required workflow preparation time [16]	2	2	not given directly, there are some time indicators thrown around in the wiki	
Required experimental time [17]	5	2	5-6 days	
Publicly available [18]	2	0	The trained model is not but information on how to create model with the same framework is	
Code licenses [19]	N/A	0		
Workflow framework used [20]	3	0	not explicitly talked about in paper but given in link (cuda-convnet)	
Archived? [21]	N/A	0		
Score	45			
Total	65			

- [1] Are you presenting a new algorithm? If so, do you provide proofs? Are you using an existing algorithm? Is the relevance of the algorithm discussed?
- [2] Which benchmarks do you use (PARSEC ARM real workloads, NAS, EEMBC, SPLASH, Rodinia, LINPACK, HPCG, MiBench, SPEC, cTuning, etc)? Are they included or should they be downloaded? Which version? Are they public or private? If they are private, is there a public analog to evaluate your artifact? What is the approximate size?
- [3] Do you require a specific compiler? Public/private? Is it included? Which version?
- [4] Do you require a program transformation tool (source-to-source, binary-to-binary, compiler pass, etc)? Public/private? Is it included? Which version?
- [5] Are binaries included? OS-specific? Which version?
- [6] Do you use specific models (ImageNet, AlexNet, MobileNets)? Are they included? If not, how to download and install? What is their approximate size?
- [7] Do you use specific data sets? Are they included? If not, how to download and install? What is their approximate size?
- [8] Is your artifact OS-specific (Linux, Windows, MacOS, Android, etc) ? Which version? Which are the main software dependencies (JIT, libs, run-time adaptation frameworks, etc); Do you need root access?
- [9] Do you need specific hardware (supercomputer, architecture simulator, CPU, GPU, neural network accelerator, FPGA) or specific features (hardware counters to measure power consumption, SUDO access to CPU/GPU frequency, etc)? Are they publicly available?
- [10] Is your artifact sensitive to run-time state (cold/hot cache, network/cache contentions, etc.)
- [11] Any specific conditions should be met during experiments (sole user, process pinning, profiling, adaptation, etc)? How long will it approximately run?
- [12] Which metrics are reported (execution time, inference per second, Top1 accuracy, static and dynamic energy consumption, etc) - particularly important for multi-objective benchmarking, optimization and co-design
- [13] What is your output (console, file, table, graph) and what is your result (exact output, numerical results, measured characteristics, etc)? Is expected result included?
- [14] How to prepare experiments and replicate/reproduce results (OS scripts, manual steps by user, IPython/Jupyter notebook, automated workflows, etc)? Do not forget to mention the maximum allowable variation of empirical results!
- [15] How much disk space required (approximately)?
- [16] How much time is needed to prepare workflow (approximately)?

[17] How much time is needed to complete experiments (approximately)?

[18] Will your artifact be publicly available? If yes, we may spend an extra effort to help you with the documentation.

[19] If you workflows and artifacts will be publicly available, please provide information about licenses. This will help the community to reuse your components.

[20] Did authors use any workflow framework which can automate and customize experiments?

[21] Note that the author-created artifacts relevant to this paper will receive the ACM "artifact available" badge *only if* they have been placed on a publicly accessible archival repository such as Zenodo, FigShare or Dryad. A DOI will be then assigned to their artifacts and must be provided here! Personal web pages, Google Drive, GitHub, GitLab and BitBucket are not accepted for this badge. Authors can provide this link at the end of the evaluation.