Typical directory structure of an experimental pack shared for Artifact Evaluation

Initialization, customization → Algorithm, model, training set → Program → Compiler → Binary and libraries

State of the system, Data set → Run-time environment

Results → Analysis

Simulator, Hardware
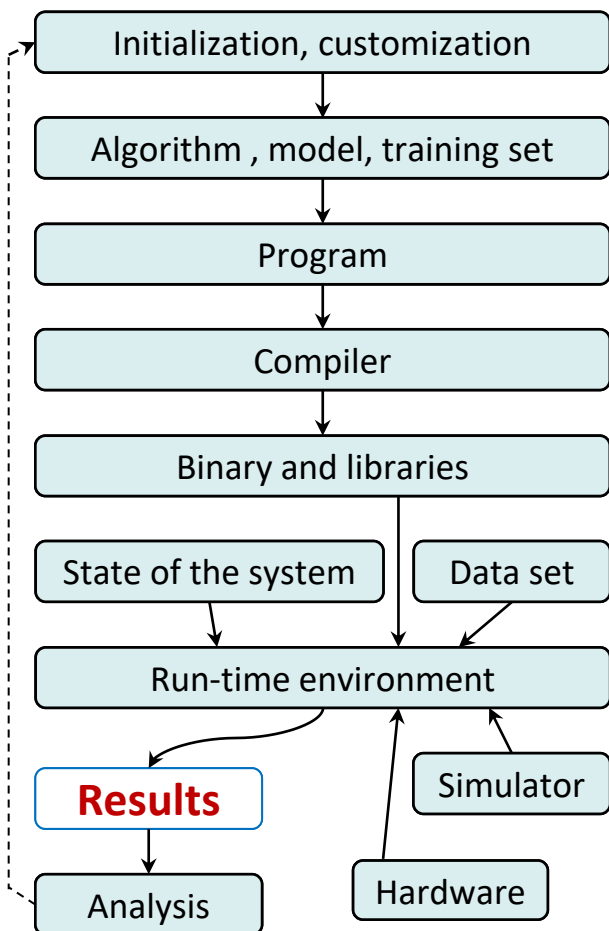
scripts/	download_dataset.sh
	download_dnn_model.bat
	init_setup_rpi3_gcc7.1.0.sh
	init_setup_windows10.bat
	init_setup_android.sh
	list_programs.sh
	compile_program.py
	run_program.py
	analyze_results.sh
	build_predictive_model.bat
	plot_graph.sh
programs/	bzip2
	classify-image
	decode-video-stream
datasets/	jpg-images/ 1.jpg, 2.jpg, 3.jpg
	png-images
	videos
third-party-tools/	gcc-7.1.0
	llvm-4.0
	opencl-profiler , cuda-profiler
	arch-simulator
	caffe, caffe2, tensorflow, cntk, mxnet
	clbast, open-blas, viennacl, libdnn
some-meta/	gcc-7.1.0-compiler-flags.txt
	llvm-4.0-compiler-flags.txt
	rpi3-hw-description.txt
some-results/	reference-speedups.txt
	predictions.cvs
	graph-autotuning-rpi3.xls

Unified experimental pack in the CK format

.ckr.json	*- CK repo name, UID and deps on other CK repos*
module/	**program** / module.py – *unified CK JSON API (functions: compile, run, autotune)*
	dataset
	package
	result
	jnotebook
.cm/	*- UIDs for each CK module*
program/	bzip2
	bzip2/.cm/meta.json *- JSON meta for all CK entries*
	bzip2/ *.c – program sources*
	classify-image
	decode-video-stream
	.cm *- UIDs for each CK entry (similar to DOI)*
dataset/	image-jpeg-0001
	video-frame-0001
package/	compiler-gcc-7.1.0
	compiler-llvm-4.0
	tool-dvdt-proof
	lib-caffe-master-cpu
	lib-tensorflow-master-opencl
result/	cgo2017-paper
	zlib-autotuning-rpi3
jnotebook/	cgo2017-workflow
	cgo2017-graph
	rpi3-gcc-autotuning