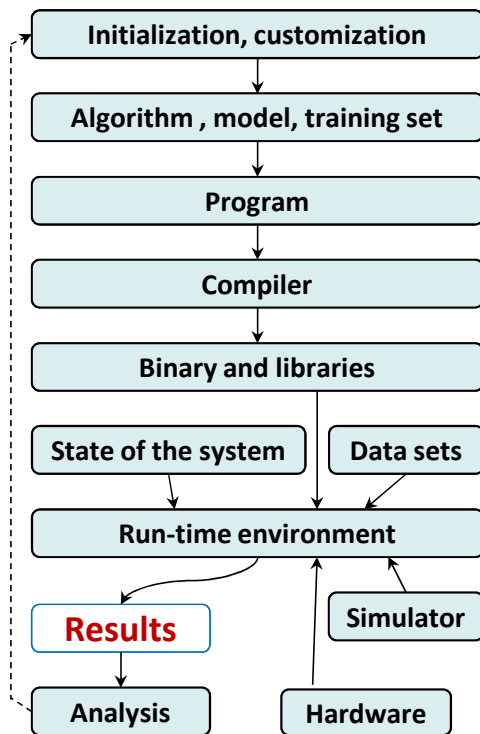


Typical directory structure of an ad-hoc experimental pack shared for Artifact Evaluation

Experiment workflow



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, clblast, openblas, libdnn

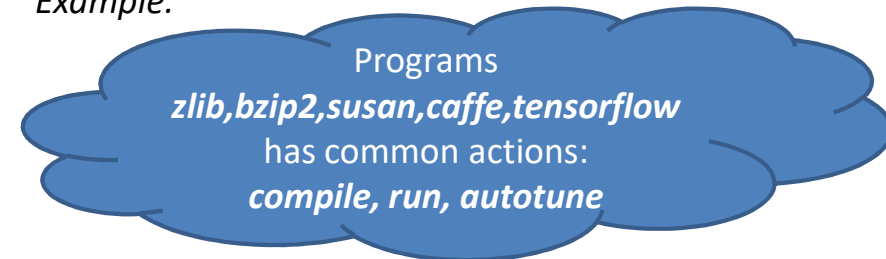
some-meta/ gcc-7.1.0-compiler-flags.txt
llvm-4.0-compiler-flags.txt
rpi3-hw-description.txt

some-results/ reference-speedups.txt
predictions.csv
graph-autotuning-rpi3.xls

(a)

Reorganize objects with common actions and meta info into 2 level directories with auto-generated Unique ID, Python module (object API) and JSON meta information

Example:



Convert code and data into CK repo (2 main dir. levels)

1 level (API)	2 level (entry)	
.ckr.json		- repo desc. including deps on other repos
module	/program	/module.py – unified CK JSON API (functions: compile, run, autotune)
<i>must be the same</i>		/.cm/meta.json – JSON description of a program module
program	/zlib	/*.c ... - program sources, build files
		/.cm/meta.json - JSON desc of zlib
	/.cm	/* - UID for zlib
.cm	/*	- UIDs for module and program

(b)