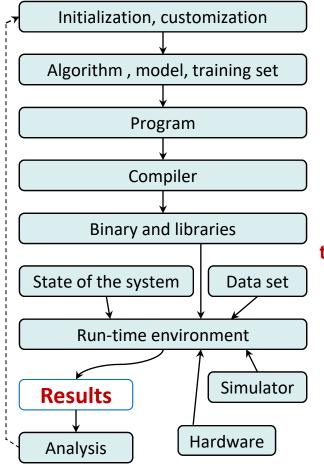
Typical directory structure of an ad-hoc experimental pack shared for Artifact Evaluation



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

Ilvm-4.0

opencl-profiler, cuda-profiler

arch-simulator

caffe, caffe2, tensorflow, cntk,

mxnet, clbast, openblas, libdnn

some-meta/ gcc-7.1.0-compiler-flags.txt

Ilvm-4.0-compiler-flags.txt

rpi3-hw-description.txt

some-results/ reference-speedups.txt

predictions.cvs

graph-autotuning-rpi3.xls

Organize objects with common actions and meta info into discoverable, reusable and shareable Collective Knowledge entries with auto-generated Unique ID, JSON meta data and Python module (wrapper) with unified JSON API

Example: **Programs** zlib,bzip2,susan,caffe,tensorflow has common actions: compile, run, autotune

Pack them to a CK repository (2 CK dir levels)

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