

1) Repositories of customizable, portable and “plug&play” AI/SW/HW components with exposed design and optimization choices

cKnowledge.org/ai

CK JSON API

AI frameworks

TensorFlow

Caffe

Caffe2

CNTK

Torch

MXNet

...

CK JSON API

Models

AlexNet

GoogleNet

VGG

ResNet

SqueezeNet

SqueezeDet

SSD

MobileNets

...

CK JSON API

Libraries

cuDNN

ArmCL

OpenBLAS

ViennaCL

CLBlast

cuBLAS

TVM

gemmlowp

...

CK JSON API

Data sets

KITTI

COCO

VOC

ImageNet

Real life objects from the community

...

CK JSON API

Targets

Linux

Windows

MacOS

Android

...

CK JSON API

Hardware

CPU

DSP

FPGA

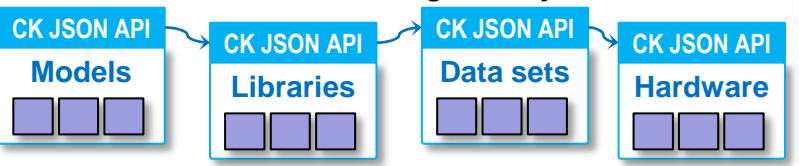
GPU

NN accelerators

Simulators

...

2) Customizable workflow framework for automatic, full stack AI/SW/HW co-design
Assemble scenarios such as image classification as LEGO™

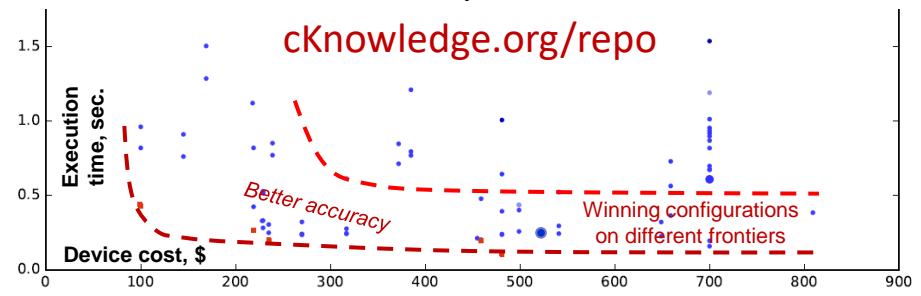


3) Open ACM ReQuEST tournaments to share, run and optimize emerging workloads such as deep learning across diverse models, data sets and platforms with GPU,DSP,NN accelerators ...

cKnowledge.org/request



4) Live scoreboard to detect winning AI/SW/HW configurations and workflows – they become available for further customization, optimization and reuse via CK



Winners in different co-design categories

