Use flow extraction as example:

* Install nvidia-docker Done
* Import image file from https://hub.docker.com/r/bitxiong/tsn/

(type in command line, some machines may need sudo and password)

* 1. Download image: docker pull bitxiong/tsn
  2. Check image: Docker image ls



* 1. Create container with mnt file (mnt file for data and code sharing):

docker run -it -v /MNT/PATH/ON/YOUR/MACHINE:/MNT/PATH/IN/CONTAINER bitxiong/tsn:latest /bin/bash

* 1. After c, you will be in container:
     + exit for quit
     + after exit:
       - docker ps -n5 for check container (container ID in first column)
       - docker start “ID” for restart container
       - docker attach “ID” for re-enter container
  2. In container: follow <https://github.com/yjxiong/temporal-segment-networks>
     + In default path, run following two commands:
     + bash build\_all.sh for environment
     + bash scripts/extract\_optical\_flow.sh INPUT\_PATH OUTPUT\_PATH NUM\_GPU for flow extraction
     + Notes:
       - Change GPU number: vim scripts/extract\_optical\_flow.sh (last row)
       - Change aspect ratio: vim scripts/extract\_optical\_flow.sh (last row)
       - Change video input type: add --ext ‘mp4’ or vim tools/build\_of.sh (row 97)
       - Want to remove regular RGB frame output: vim tools/build\_of.sh (row 52)
       - Must keep the file structure as follow:
         * INPUT\_PATH

--first-level subfile path1

--action11.mp4

--action12.mp4

…

--first-level subfile path2

…

* + - * + OUTPUT\_PATH

Empty file

Above is pipeline for flow extraction. We could base on it to build our own.