#include "network.h"

#include "utils.h"

#include "parser.h"

#include "option\_list.h"

#include "blas.h"

#include "classifier.h"

#ifdef WIN32

#include <time.h>

#include "gettimeofday.h"

#else

#include <sys/time.h>

#endif

void demo\_art(char \*cfgfile, char \*weightfile, int cam\_index)

{

#ifdef OPENCV

network net = parse\_network\_cfg(cfgfile);

if(weightfile){

load\_weights(&net, weightfile);

}

set\_batch\_network(&net, 1);

srand(2222222);

cap\_cv \* cap;

cap = get\_capture\_webcam(cam\_index);

char \*window = "ArtJudgementBot9000!!!";

if(!cap) error("Couldn't connect to webcam.\n");

create\_window\_cv(window, 0, 512, 512);

int i;

int idx[] = {37, 401, 434};

int n = sizeof(idx)/sizeof(idx[0]);

while(1){

image in = get\_image\_from\_stream\_cpp(cap);

image in\_s = resize\_image(in, net.w, net.h);

show\_image(in, window);

float \*p = network\_predict(net, in\_s.data);

printf("\033[2J");

printf("\033[1;1H");

float score = 0;

for(i = 0; i < n; ++i){

float s = p[idx[i]];

if (s > score) score = s;

}

score = score;

printf("I APPRECIATE THIS ARTWORK: %10.7f%%\n", score\*100);

printf("[");

int upper = 30;

for(i = 0; i < upper; ++i){

printf("%c", ((i+.5) < score\*upper) ? 219 : ' ');

}

printf("]\n");

free\_image(in\_s);

free\_image(in);

wait\_key\_cv(1);

}

#endif

}

void run\_art(int argc, char \*\*argv)

{

int cam\_index = find\_int\_arg(argc, argv, "-c", 0);

char \*cfg = argv[2];

char \*weights = argv[3];

demo\_art(cfg, weights, cam\_index);

}