

OpenCV - Bug # 4373: Assertion failed in text module with OCRHMMDecoder

Status:	Done	Priority:	Normal
Author:	Lukas Stehr	Category:	contrib/text
Created:	2015-06-02	Assignee:	
Updated:	2015-07-24	Due date:	
Affected version:	branch 'master' (3.0-dev)		
Difficulty:			
Pull request:			
Operating System:	Mac OSX		
HW Platform:	x86		
Description:	<p>I think I encountered a bug in the text module of opencv_contrib. @OCRHMMDecoder::run@ works fine for most images, but there is the case that an assertion inside OCRHMMDecoder fails for some images.</p> <p>Sample Code:</p> <pre><pre> #include <iostream> #include "opencv2/opencv.hpp" #include "opencv2/text.hpp" int main(int argc, char* argv[]) { cv::Mat image = cv::imread("./bad.jpg"); cv::cvtColor(image, image, cv::COLOR_BGR2GRAY); cv::Mat transitionProbabilities; cv::FileStorage fs("./OCRHMM_transitions_table.xml", cv::FileStorage::READ); fs["transition_probabilities"] >> transitionProbabilities; fs.release(); std::string charWhitelist = "0123456789abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ"; cv::Mat emissionProbabilities = cv::Mat::eye((int)charWhitelist.size(), (int)charWhitelist.size(), CV_64FC1); cv::Ptr<cv::text::OCRHMMDecoder> ocr = cv::text::OCRHMMDecoder::create(cv::text::loadOCRHMMClassifierNM("./OCRHMM_knn_model_data.xml.gz "), charWhitelist, transitionProbabilities, emissionProbabilities); std::string output = ""; ocr->run(image, output); std::cout << output << std::endl; } </pre></pre> <p>Executing this code with the default classifier files and the attached @bad.jpg@ gives:</p> <pre><pre> OpenCV Error: Assertion failed (dsize.area() > 0 (inv_scale_x > 0 && inv_scale_y > 0)) in resize, file /Users/lukasstehr/Lukas/Code/opencv/modules/imgproc/src/imgwarp.cpp, line 3209 libc++abi.dylib: terminating with uncaught exception of type cv::Exception:</pre>		

```
/Users/lukasstehr/Lukas/Code/opencv/modules/imgproc/src/imgwarp.cpp:3209: error: (-215) dsize.area() > 0
|| (inv_scale_x > 0 && inv_scale_y > 0) in function resize
</pre>
```

The code works fine with most other images, for example the attached @good.jpg@.

History

2015-06-19 01:54 pm - Vadim Pisarevsky

- *Category set to contrib/text*

2015-07-24 11:47 am - Lluís Gomez

- *Status changed from New to Done*

This bug is fixed in PR #308. The problem was when trying to recognize very elongated contours. Since every contour is resized to a normalized size, that would give a destination width/height of zero pixels for elongated contours and this causes the assertion failed error.

https://github.com/Itseez/opencv_contrib/pull/308

Thanks!

Files

bad.jpg	2.8 kB	2015-06-02	Lukas Stehr
good.jpg	2.2 kB	2015-06-02	Lukas Stehr