

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

<b>Status:</b>	Done	<b>Priority:</b>	Normal
<b>Author:</b>	Lukas Stehr	<b>Category:</b>	contrib/text
<b>Created:</b>	2015-06-02	<b>Assignee:</b>	
<b>Updated:</b>	2015-07-24	<b>Due date:</b>	
<b>Affected version:</b>	branch 'master' (3.0-dev)		
<b>Difficulty:</b>			
<b>Pull request:</b>			
<b>Operating System:</b>	Mac OSX		
<b>HW Platform:</b>	x86		
<b>Description:</b>	<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>&lt;pre&gt; #include &lt;iostream&gt;  #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"] &gt;&gt; transitionProbabilities;     fs.release();      std::string charWhitelist = "0123456789abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ";     cv::Mat emissionProbabilities = cv::Mat::eye((int)charWhitelist.size(), (int)charWhitelist.size(), CV_64FC1);      cv::Ptr&lt;cv::text::OCRHMMDecoder&gt; ocr = cv::text::OCRHMMDecoder::create(cv::text::loadOCRHMMClassifierNM("./OCRHMM_knn_model_data.xml.gz "), charWhitelist, transitionProbabilities, emissionProbabilities);      std::string output = "";     ocr-&gt;run(image, output);      std::cout &lt;&lt; output &lt;&lt; std::endl; } &lt;/pre&gt;</pre> <p>Executing this code with the default classifier files and the attached @bad.jpg@ gives:</p> <pre>&lt;pre&gt; OpenCV Error: Assertion failed (dsize.area() &gt; 0    (inv_scale_x &gt; 0 &amp;&amp; inv_scale_y &gt; 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

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**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](https://github.com/Itseez/opencv_contrib/pull/308)

Thanks!

## Files

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