PROJECT REPORT

Image Processing Using Convolution Kernel Method

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08.02.0031
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STATEMENT OF ORIGINALITY

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Hereby certify that the project I made was the result of masterpiece alone and it is not a plagiarism, except those started in print that it taken from other writing. If it is proved in later days that the project is the result of rubbing, hence I settle for sanction.

Semarang, 16 January 2012

Hendra Wijaya

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FOREWORD

This project has given me a lot of new experience and knowledge about java especially in studying Convolution Kernel Method and Data Structure.

Each work, the success or failure in doing this project is the thing that I gained during the three and half years covered in college. I will not be able to complete the project and this report without the help of GOD and a few other.

I take this opportunity to thank:

1. Both my parents who have been supportive, encouraging and providing the cost to my studies over the years.
2. Mrs. Shinta Estri W, who has become a mentor, source of inspiration and solution in this project.
3. My lecturer: Mr. Soeyanto EA, Ir, M.Sc, who have given me the opportunity to learn different things, inspiration, experience and knowledge about this project.
4. All of my friends who have supported me directly or indirectly in working on this project, companion in arms for all these years in college.

Semarang, 16 January 2012

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Sharpening, blurring and embossing system has been widely used in all around the world especially in image processing, but sometimes very hard and difficult to understand to applied it in our needs. In this project I tried to simulate an sharpening, blurring and embossing system in image file using java language which is easy to understand for user.

Convolution Kernel Method is used for making the convolution operation between image and kernel. The process that happen in convolution operation is summation of the multiplication kernel with image pixel. The convolution process take the biggest part in this project for returning the pixel value back to the center of the 5x5 image place.

Keyword : Convolution kernel, Sharpening kernel, Blurring kernel, embossing kernel
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