Image Deblurring in Presence of Gaussian and Impulsive Noise

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Image Deblurring in Presence of Gaussian and Impulsive Noise

Dissertation submitted in

June 2013

to the department of

Computer Science and Engineering

of

National Institute of Technology Rourkela

in partial fulfillment of the requirements

for the degree of

Master of Technology

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Certificate

This is to certify that the work in the thesis entitled *Image Deblurring in presence of Gaussian and Impulsive noise* by *Suman Kumar Choudhury*, bearing roll number 211CS2276, is a record of an original research work carried out by him under my supervision and guidance in partial fulfillment of the requirements for the award of the degree of *Master of Technology* in *Computer Science and Engineering*. Neither this thesis nor any part of it has been submitted for any degree or academic award elsewhere.

Pankaj Kumar Sa

Acknowledgment

This dissertation, though an individual work, has benefited in various ways from several people. Whilst it would be simple to name them all, it would not be easy to thank them enough.

The enthusiastic guidance and support of *Prof. Pankaj Kumar Sa* inspired me to stretch beyond my limits. His profound insight has guided my thinking to improve the final product. My solemnest gratefulness to him.

My sincere thanks to *Prof. B.Majhi*, *Prof. S. K. Jena* and *Prof. S. K. Rath* and for their continuous encouragement and invaluable advice.

It is indeed a privilege to be associated with people like *Prof. A. K. Turuk*, *Prof. B. D. Sahoo*. They have made available their support in a number of ways.

My humble acknowledgment to *Prof. R. K. Mahapatra*, *Prof. B. K. Patra*, *Prof. R.K.Dash*, and *Prof. M.M.Sahoo* for nourishing my intellectual maturity.

Overwhelming thanks to *Prof. D. P. Mohapatra*, *Prof. P. M. Khilar*, *Prof. S. Chinara*, and *Prof. K. S. Babu* for their generosity.

Many thanks to my comrades and fellow research colleagues. It gives me a sense of happiness to be with you all.

Finally, my heartfelt thanks to my family for their unconditional love and support. Words fail me to express my gratitude to my beloved parents, who sacrificed their comfort for my betterment.

Suman Kumar Choudhury

Abstract

Image restoration is an essential and unavoidable preprocessing operation for many security applications like biometric security, video surveillance, object tracking, image data communication etc.

Images are generally degraded due to faulty sensor, channel transmission error, camera mis-focus, atmospheric turbulence, relative motion between camera and object etc. Such conditions are inevitable while capturing a scene through camera. Restoration of such images is highly essential for further image processing and other tasks.

***Keywords*:** Image restoration, Impulsive noise, Gaussian noise, Motion blur, Out-of-focus blur, Regularization, Convex minimization.

The work in this thesis has been submitted to a journal and is under review. The complete thesis shall be published once the review process ends.

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