

Simultaneous Image Inpainting and Denoising with Interior Point Method on an l^1 TV Model

R. A. Concepcion¹ and M. C. Neri²

Abstract: This research deals with the simultaneous inpainting and denoising of a digital image using an l^1 variational model. The minimization model is formulated as a linear programming problem and solved by feasible and infeasible primal-dual interior point methods. Numerical experiments show the efficiency of the model-solution approach in inpainting and removing of impulse noise.

^{1,2} Institute of Mathematics
University of the Philippines
Diliman, Quezon City, Philippines
rachelannegconcepcion@gmail.com, marrick@math.upd.edu.ph