

De la Vallée Poussin Interpolation method for image resizing

D. Occorsio¹, G. Ramella², and W. Themistoclakis²

¹ University of Basilicata, Potenza, Italy
`donatella.occorsio@unibas.it`

² CNR National Research Center of Italy, Naples, Italy
`{giuliana.ramella, woula.themistoclakis}@cnr.it`

Abstract

The aim of this talk is to show how de la Vallée Poussin type interpolation based on Chebyshev zeros of first kind, can be applied to resize an arbitrary color digital image. In fact, using such kind of approximation, we get an image scaling method running for any desired scaling factor or size, in both downscaling and upscaling. The peculiarities and the performance of such method will be discussed.

Keywords: Image resizing, Lagrange interpolation, de la Vallée Poussin filtered interpolation, Chebyshev zeros