Department of Mathematics, Statistics and Computer Science

COLLOQUIUM ANNOUNCEMENT

BiLinear, Bicubic, and In Between Spline Interpolation

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2:00 PM, Thursday, February 15, 2018

Cudahy Hall, Room 401

Abstract

Artificially increasing the resolution of a pixelized image is an important and interesting problem. In this talk, I will present the local image space technique of bicubic spline interpolation. First I will present interpolation in a time series a linear interpolation, cubic interpolation, and cubic spline interpolation. After describing how interpolation works in one dimension, I will generalize it to two dimensions and describe interpolation in an image via bilinear interpolation, bicubic interpolation, and bicubic spline interpolation. This will be an educational talk on applied polynomial interpolation with the use of matrix algebra for systems of equations.

1313 W. Wisconian Avenue, Cudahy Hall, Room 412Milwaukee, WI 532011881 For further information: see <u>http://www.marquette.edu/mscs/resourcescolloquium.shtml</u> or contact Dr. Daniel Rowe#414288-5228, daniel.rowe@marquette.edu

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