Animation Morphing Using Piecewise Warping On Local Environment

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BACHELOR OF COMPUTER SCIENCE (Hons)

THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF BACHELOR OF SCIENCE

FACULTY OF SCIENCE COMPUTER AND MATHEMATICS

UNIVERSITITEKNOLOGI MARA

MAY 2011

Acknowledgement

Firstly, I'm graceful to god almighty for giving me the chance to accomplish my final year project successfully and completed my final report within the given time period. I, hereby, give all of my gratitude for all the inspiration and guidance.

I would like to show my appreciation and gratitude especially to my supervisor, Dr. Fakhrul Hazman Bin Yusoff for giving me the chance to complete my final year project under his supervision. I grateful for all the guidance, advices and helps given during the final year project period. And I also would like to thanks to the coordinator of my final year project, Dr. Sharifalillah Binti Nordin. Thanks for all the helps, advices and assistance in helping me learning something new each day.

Finally, I would to thank to all my fellow final year student students for all your encouragement and supports. And also to all the lecturers and staffs under the Computer Science and Mathematics Faculty for all your direct and indirect help in making everything possible. We pray that God will bless you all for your absolute kindness and support.

Abstract

This project present an appropriate way to morph a facial expression by applying a piecewise warping technique, which is using bilinear function. In which we apply a simple transformation locally but allow that transformation to vary across the image. An advantage of this approach is that we can leave some areas of the image unchanged whilst warping other to the significant degree. While local warping appear to be a promises method to warping image. Its effectiveness still has to be future proved. The process of using piecewise warping operation that require user first to define a center point. The purpose of center point is to determine the specific area of image to be warp. The four grids will appear on the top of the image. Next, user has to define four control points corresponding to the grid on source image and four control points on the image to be warped later. There are eight coefficients to be determined, but the four corner points are sufficient to solve for them exactly. Furthermore, the facial images must in the 2D. In this respect, an image is a non planar with a grey scale.

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