HIGHER TECHNICAL INSTITUTE

COMPUTER STUDIES DEPARTMENT

DIPLOMA PROJECT

IMPLEMENTATION OF THE VORONOI DIAGRAM AND DELAUNAY TRIANGULATION FOR THE 3D-RECONSTRUCTION OF HUMAN BONES

CS/141

SYSTEMS ANALYSIS

Designed by:

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Summary

Implementation Of The Voronoi Diagram And The Delaunay Triangulation For The 3D-Reconstruction Of Human Bones

Project CS/141
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Having a system that gives you the ability to reconstruct a 3D object on the screen can be very helpful, since you can analyze the object/model completely and effectively. Up to now, the existing imaging systems produce only 2D images and the development of a 3D reconstruction system can be described as a revolution in medicine.

The subject of this project is a part of the EU-project, suggested by the European Union to the Higher Technical Institute, called "KIT" (Keep In Touch).

It is important to emphasize that the purpose of this project is not to make the perfect 3D Reconstruction System for Human Bones, but to fill in the gab between the existing 2D Imaging System and a perfect 3D Reconstruction System. Project CS/141 makes an attempt to solve this problem.

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IMPLEMENTATION OF THE VORONOI DIAGRAM AND DELAUNAY TRIANGULATION FOR THE 3D RECONSTRUCTION OF HUMAN BONES

This project is submitted in partial
fulfillment of the requirements for the
award of the Diploma in Computer Studies

CS/141

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