Christopher Nielsen

Generating NURBS Surfaces through 3D Silhouette Scanning

Division: Earth & Environmental Sciences / Automotive
Category: Intermediate
Region: Calgary Youth
City: Calgary, AB
School:

Abstract: In this project a system of 3D silhouette scanning is proposed and implemented that would allow for the automatic computational generation of 3D NURBS (Non-Uniform Rational B-Spline) surfaces representing real world objects for use in 3D computer graphics applications.

Biography

Christopher was born in Ottawa and moved to Calgary when he was 3. He has been interested with computers for the greater part of his life and hopes to keep learning as a lifelong obsession. This is his first year in a science fair and so far he has enjoyed it. Some of his hobbies include soccer, piano, solving math problems, reading, hiking, biking programming, 3D modeling, hockey, running, fixing computers, eating, sleeping, calculus, biology, algorithm development, guitar, traveling, thinking, watching lectures, electronics, praying, swimming, building things out of duct tape and writing biographies about himself.

Awards	Value
The University of Western Ontario Scholarship Gold Medallist - $2000 Entrance Scholarship Sponsor: University of Western Ontario	$2 000
Honourable Mention - Automotive - Intermediate Sponsor: AUTO21	$100
Gold Medal - Computing & Information Technology - Intermediate Sponsor: Intel of Canada, Ltd.	$1 500
Total	$3 600

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