



THESIS ASSIGNMENT

Name and Surname: Kristína Korecová
Study programme: Mathematics (Single degree study, bachelor I. deg., full time form)
Field of Study: Mathematics
Type of Thesis: Bachelor's thesis
Language of Thesis: Slovak
Secondary language: English

Title: Algoritmy triangulácie implicitne definovanej plochy

Annotation: Práca sa zaoberá oboznámením sa s algoritmami na získanie triangulácie regulárnej implicitne definovanej plochy. Navrhne sa postup triangulácie v niektorých typoch singulárnych bodov na ploche.

Aim: Návrh a odskúšanie postupu triangulácie implicitne definovanej plochy. Zameriavame sa na pažravý algoritmickej postup začínajúci singulárnymi krivkami, resp. bodmi, ak také sú na ploche.

Literature: B. R. de Araújo, Daniel S. Lopes, Pauline Jepp, Joaquim A. Jorge, and Brian Wyvill. 2015. A Survey on Implicit Surface Polygonization. ACM Comput. Surv. 47, 4, Article 60 (July 2015), 39 pages. DOI:<https://doi.org/10.1145/2732197>

E. Hartmann: A marching method for the triangulation of surfaces, The Visual Computer (1998), 14, pp. 95–108

S. Akkouché & E. Galin: Adaptive Implicit Surface Polygonization Using Marching Triangles, Computer Graphics Forum (2001), Vol. 20, pp. 67–80

Keywords: implicitne definovaná plocha, triangulácia, singulárne body

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Assigned: 20.10.2020

Approved: 20.10.2020

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