Errata for Exact and Adaptive Signed Distance Fields Computation for Rigid and Deformable Models on GPUs

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Abstract

This document tracks the errata in the paper of "Exact and Adaptive Signed Distance Fields Computation for Rigid and Deformable Models on GPUs".

1 Introduction

The errata of the paper of "Exact and Adaptive Signed Distance Fields Computation for Rigid and Deformable Models on GPUs" are tracked in this document, whose newest version can be found at `http://graphics.ewha.ac.kr/gADF/gADF.pdf`. In the following we will list the errata in document order. Their location will be referenced by the section they appear in rather than the page number, since we do not expect the former to change in the errata correction process. We thank Prof. Moon-Ryul Jung for pointing out our typing errors.

2 The Errata in The Book

1. We revised the Algorithm 1 in Section 3.2 by changing the list N to a member variable of octree node $O.N$.

   We change line 1 to $2^{3l} - 1$.

   We change line 6 to $O_i.N \leftarrow 0$.

   We change line 17 to $O_i.N \leftarrow i$.

   We change line 20 to for **each** node O_t **in parallel** do.

   We change line 21 to if $O_t.N - O_{t-1}.N > \alpha$

2. In Section 5.1, we revised the pseudo code 1) by adding a root node and remove the parent node:

1) Add the root node t to a list l, and compute the distance between p and any triangle enclosed in the node t, and use this distance to initialize u.