

論文 / 著書情報
Article / Book Information

題目(和文)	美的意図と時間一貫性を考慮した三次元形状から抽出される特徴線の様式化
Title(English)	Artistically Intended and Temporally Coherent Stylization of Feature Lines Extracted from 3D Models
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Thesis Outline

Title : Artistically Intended and Temporally Coherent Stylization of Feature Lines Extracted from 3D Models

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This thesis proposes a full framework for artistically intended and temporally coherent stylization of feature lines extracted from 3D models. Two different approaches are introduced. The first approach is based on surface segmentation and allows per-region stylization with low computational cost. A second approach, based on line matching, enables per-stroke stylization to produce uncluttered and visually appealing line drawings. The proposed stylization system is composed of two phases. In the user annotation phase, the user annotates strokes with unique styles. In the rendering phase, the annotated strokes are matched to current frame feature lines to extrapolate the stylization in nearby viewpoints and guide a spatio-temporal optimization to produce temporally coherent animations. The proposed stylization system is evaluated through quantitative tests measuring line matching accuracy, usability, computational performance and temporal behavior.