EG MAM 2020

Eurographics 2020 Workshop on Material Appearance Modeling

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The 31st Eurographics Symposium on Rendering

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Preface

The purpose of this workshop series is to discuss and define open issues in the modeling of material appearance. Acquiring, modeling, editing and rendering material appearance are active areas in computer graphics. In this workshop series we gather researchers and users of material appearance models to review the progress made in this domain, and what the promising lines of new research are.

The format of the workshop is presentation of positions and ideas followed by questions and comments. Position papers and/or ideas for presentations are submitted by potential speakers, and reviewed by the workshop co-chairs for relevance and clarity. Seven presentations were accepted with accompanying papers. The position papers are not like conventional conference papers. The main purpose of the papers is to summarize topics, report progress, pose problems and suggest research directions, rather than present finished results.

This year the event was divided into three parts — "Acquiring Accurate Input," "Subsurface Scattering Issues" and "Material Appearance Modeling Community Infrastructure." The presentations and question and answer sessions were held online due to the 2020 pandemic. The result was a larger than usual audience and questions from many new workshop attendees. The videos of the presentations are openly available on Youtube:

https://www.youtube.com/watch?v=QkP5u4yXTQA
Presentations:
'An Adaptive Metric for BRDF Appearance Matching' by J. Bieron, P. Peers
'The Problem of Entangled Material Properties in SVBRDF Recovery' by S. Saryazdi, C. Murphy, S. Mudur
'Improving Spectral Upsampling with Fluorescence' by L. König, A. Jung, C. Dachsbacher

00:00 Introduction
00:30 An Adaptive Metric for BRDF Appearance Matching
19:30 The Problem of Entangled Material Properties in SVBRDF Recovery
35:36 Improving Spectral Upsampling with Fluorescence

https://www.youtube.com/watch?v=0ppdTwPj5EI
Presentations:
'A Genetic Algorithm Based Heterogeneous Subsurface Scattering Representation' by M. Kurt
'On the Nature of Perceptual Translucency' by D. Gigilashvili, J-B. Thomas, J. Yngve Hardeberg, M. Pedersen

00:00 Session start
00:20 A Genetic Algorithm Based Heterogeneous Subsurface Scattering Representation
15:20 On the Nature of Perceptual Translucency

https://www.youtube.com/watch?v=0mcSOQkkiyM&t=706s
Presentations:
'Bonn Appearance Benchmark' by S. Merzbach, R. Klein
'A Taxonomy of Bidirectional Scattering Distribution Function Lobes for Rendering Engineers' by M. McGuire, J. Dorsey, E. Haines, J. F. Hughes, S. Marschner, M. Pharr, P. Shirley

00:00 Session start
00:22 Bonn Appearance Benchmark
11:53 A Taxonomy of Bidirectional Scattering Distribution Function Lobes for Rendering Engineers

Holly Rushmeier
Reinhard Klein
Workshop Co-Chairs

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