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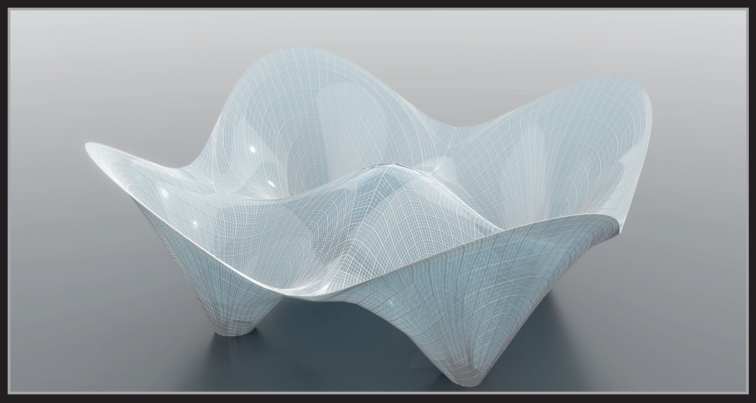

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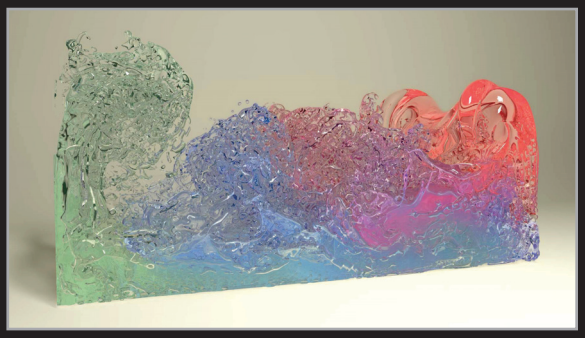

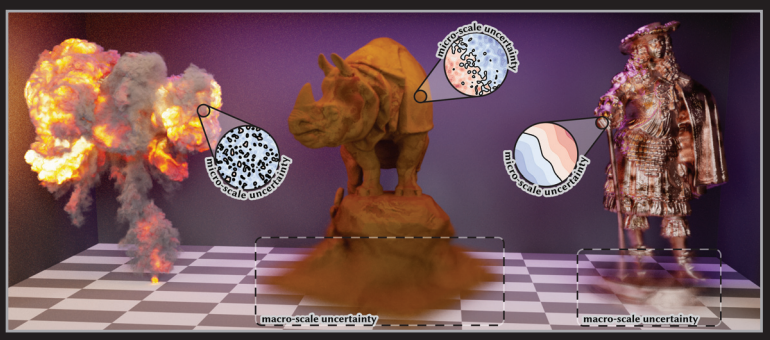
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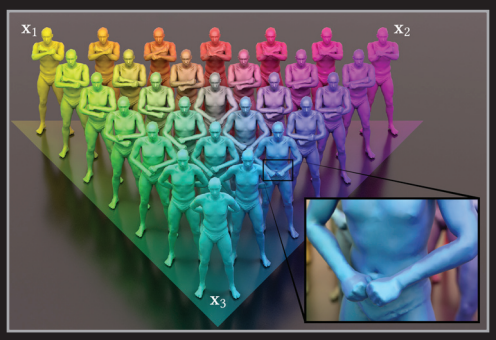
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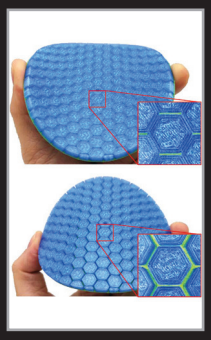

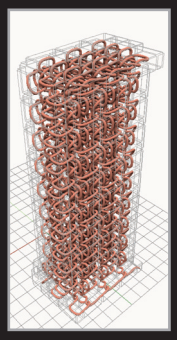

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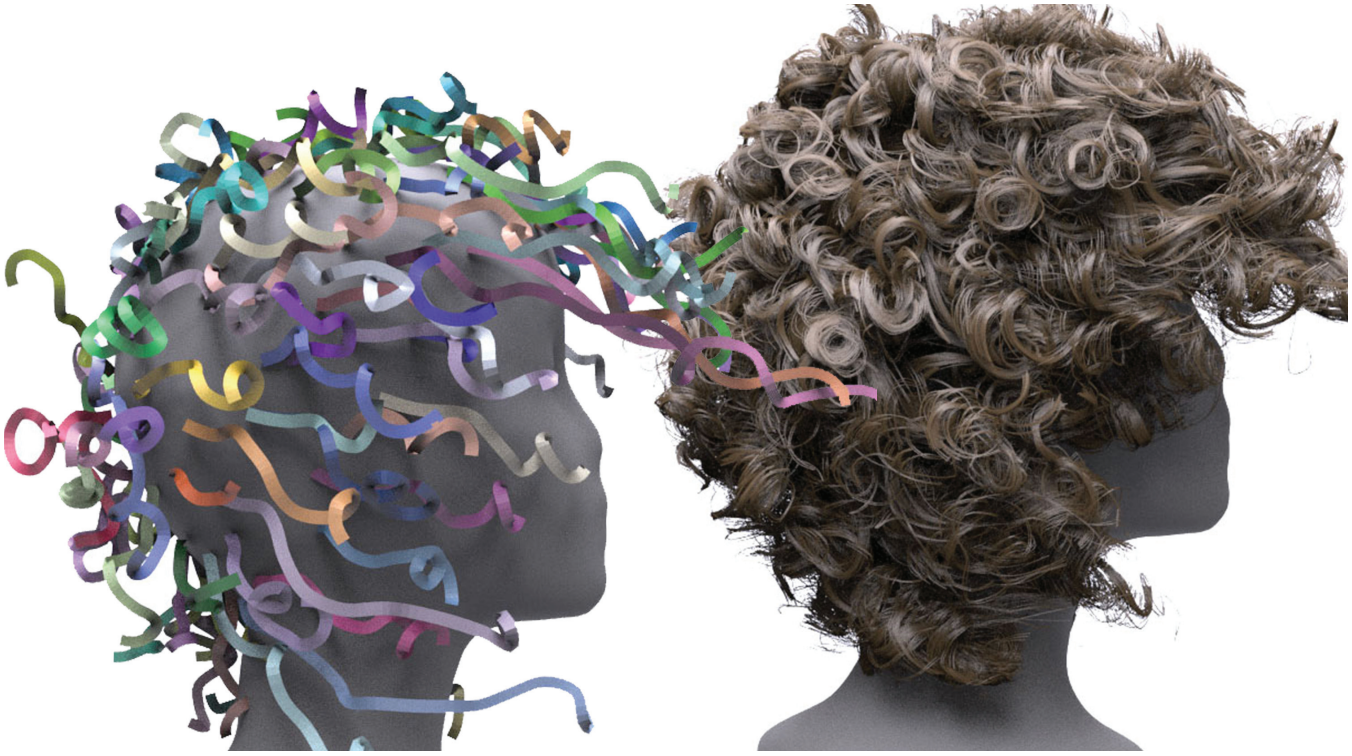

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Table of Contents

Preface xiii

Vector Graphics

Text-to-Vector Generation with Neural Path Representation ..... Article 36
Peiying Zhang, Nanxuan Zhao, Jing Liao

Deep Sketch Vectorization via Implicit Surface Extraction ..... Article 37
Chuan Yan, Yong Li, Deepali Aneja, Matthew Fisher, Edgar Simo-Serra, Yotam Gingold

Robust Containment Queries over Collections of Rational Parametric Curves via Generalized Winding Numbers ..... Article 38
Jacob Spainhour, David Gunderman, Kenneth Weiss

Material Texture Generation and Painting

DreamMat: High-quality PBR Material Generation with Geometry- and Light-aware Diffusion Models ..... Article 39
Yuqing Zhang, Yuan Liu*, Zhiyu Xie, Lei Yang, Zhongyuan Liu, Mengzhou Yang, Runze Zhang, Qilong Kou, Cheng Lin, Wenping Wang, Xiaogang Jin*

EASI-Tex: Edge-Aware Mesh Texturing from Single Image ..... Article 40
Sai Raj Kishore Perla, Yizhi Wang, Ali Mahdavi-Amiri, Hao Zhang

Monte Carlo for PDEs

Walkin' Robin: Walk on Stars with Robin Boundary Conditions ..... Article 41
Bailey Miller, Rohan Sawhney*, Keenan Crane**, Ioannis Gkioulekas***

Stochastic Computation of Barycentric Coordinates ..... Article 42
Fernando de Goes, Mathieu Desbrun

Generative 3D Geometry

BlockFusion: Expandable 3D Scene Generation using Latent Tri-plane Extrapolation ..... Article 43
Zhennan Wu, Yang Li, Han Yan, Taizhang Shang, Weixuan Sun, Senbo Wang, Ruikai Cui, Weizhe Liu, Hiroyuki Sato, Hongdong Li, Pan Ji

SketchDream: Sketch-based Text-to-3D Generation and Editing ..... Article 44
Feng-Lin Liu, Hongbo Fu, Yu-Kun Lai, Lin Gao

3D Face Generator and Animation

Portrait3D: Text-Guided High-Quality 3D Portrait Generation Using Pyramid Representation and GANs Prior ..... Article 45
Yiqian Wu, Hao Xu, Xiangjun Tang, Xien Chen, Siyu Tang, Zhebin Zhang, Chen Li, Xiaogang Jin

DiffPoseTalk: Speech-Driven Stylistic 3D Facial Animation and Head Pose Generation via Diffusion Models ..... Article 46
Zhiyao Sun, Tian Lv, Sheng Ye, Matthieu Lin, Jenny Sheng, Yu-Hui Wen, Minjing Yu, Yong-Jin Liu

S3: Speech, Script and Scene driven Head and Eye Animation ..... Article 47
Yifang Pan, Rishabh Agrawal, Karan Singh

* and ** denote equal contribution

Table of Contents

Differentiable Rendering

Conditional Mixture Path Guiding for Differentiable Rendering ..... Article 48
Zhimin Fan, Pengcheng Shi, Mufan Guo, Ruoyu Fu, Yanwen Guo, Jie Guo

ZeroGrads: Learning Local Surrogates for Non-Differentiable Graphics ..... Article 49
Michael Fischer, Tobias Ritschel

Geometry: Reconstruction

NeuralTO: Neural Reconstruction and View Synthesis of Translucent Objects ..... Article 50
Yuxiang Cai, Jiaxiong Qiu, Zhong Li, Bo Ren

NeurCADRecon: Neural Representation for Reconstructing CAD Surfaces by Enforcing Zero Gaussian Curvature.... Article 51
Qiujie Dong, Rui Xu, Pengfei Wang, Shuangmin Chen, Shiqing Xin, Xiaohong Jia, Wenping Wang, Changhe Tu

Consistent Text-to-Image

Training-Free Consistent Text-to-Image Generation..... Article 52
Yoad Tewel, Omri Kaduri, Rinon Gal, Yoni Kasten, Lior Wolf, Gal Chechik, Yuval Atzmon

Fluids and Flows

A Vortex Particle-on-Mesh Method for Soap Film Simulation ..... Article 53
Ningxiao Tao, Liangwang Ruan, Yitong Deng, Bo Zhu, Bin Wang, Baoquan Chen

Multi-Material Mesh-Based Surface Tracking with Implicit Topology Changes ..... Article 54
Peter Heiss-Synak, Aleksei Kalinov*, Malina Strugaru, Arian Etemadi, Huidong Yang, Chris Wojtan*

Kinetic Simulation of Turbulent Multifluid Flows..... Article 55
Wei Li, Kui Wu, Mathieu Desbrun

An Induce-on-Boundary Magnetostatic Solver for Grid-Based Ferrofluids..... Article 56
Xingyu Ni, Ruicheng Wang*, Bin Wang, Baoquan Chen*

Going with the Flow..... Article 57
Yousuf Soliman, Marcel Padilla, Oliver Gross, Felix Knöppel, Ulrich Pinkall, Peter Schröder

Efficient Debris-flow Simulation for Steep Terrain Erosion ..... Article 58
Aryamaan Jain, Bedrich Benes, Guillaume Cordonnier

Geometry: Mappings and Fluids

Smooth Bijective Projection in a High-order Shell..... Article 59
Shibo Liu, Yang Ji, Jia-Peng Guo, Ligang Liu, Xiao-Ming Fu

Lifting Directional Fields to Minimal Sections ..... Article 60
David Palmer, Albert Chern, Justin Solomon

Seamless Parametrization in Penner Coordinates ..... Article 61
Ryan Capouellez, Denis Zorin

* and ** denote equal contribution

Table of Contents

Fast Radiance Fields

A Hierarchical 3D Gaussian Representation for Real-Time Rendering of Very Large Datasets ..... Article 62
Bernhard Kerbl, Andreas Meuleman*, Georgios Kopanas, Michael Wimmer, Alexandre Lanvin, George Drettakis*

SMERF: Streamable Memory Efficient Radiance Fields for Real-Time Large-Scene Exploration ..... Article 63
Daniel Duckworth, Peter Hedman*, Christian Reiser, Peter Zhizhin, Jean-François Thibert, Mario Lučić, Richard Szeliski, Jonathan T. Barron*

StopThePop: Sorted Gaussian Splatting for View-Consistent Real-time Rendering ..... Article 64
Lukas Radl, Michael Steiner*, Mathias Parger, Alexander Weinrauch, Bernhard Kerbl, Markus Steinberger*

VR, Eye Tracking, Perception

Towards Motion Metamers for Foveated Rendering ..... Article 65
Taimoor Tariq, Piotr Didyk

Cybersickness Reduction via Gaze-Contingent Image Deformation ..... Article 66
Colin Groth, Marcus Magnor, Steve Grogorick, Martin Eisemann, Piotr Didyk

PEA-PODs: Perceptual Evaluation of Algorithms for Power Optimization in XR Displays ..... Article 67
Kenneth Chen, Thomas Wan, Nathan Matsuda, Ajit Ninan, Alexandre Chapiro, Qi Sun

Holographic Parallax Improves 3D Perceptual Realism ..... Article 68
Dongyeon Kim, Seung-Woo Nam*, Suyeon Choi, Jong-Mo Seo, Gordon Wetzstein, Yoonchan Jeong*

Simulating Nature

Differentiable Voronoi Diagrams for Simulation of Cell-Based Mechanical Systems ..... Article 69
Logan Numerow, Yue Li, Stelian Coros, Bernhard Thomaszewski

Scintilla: Simulating Combustible Vegetation for Wildfires ..... Article 70
Andrzej Kokosza, Helge Wrede, Daniel Gonzalez Esparza, Milosz Makowski, Daoming Liu, Dominik L. Michels, Sören Pirk, Wojtek Pałubicki

Cyclogenesis: Simulating Hurricanes and Tornadoes ..... Article 71
Jorge Alejandro Amador Herrera, Jonathan Klein, Daoming Liu, Wojtek Pałubicki, Sören Pirk, Dominik L. Michels

Clothing Geometry

DressCode: Autoregressively Sewing and Generating Garments from Text Guidance ..... Article 72
Kai He, Kaixin Yao, Qixuan Zhang, Lingjie Liu, Jingyi Yu, Lan Xu

Proxy Asset Generation for Cloth Simulation in Games ..... Article 73
Zhongtian Zheng, Tongtong Wang, Qijia Feng, Zherong Pan, Xifeng Gao, Kui Wu

Automatic Digital Garment Initialization from Sewing Patterns ..... Article 74
Chen Liu, Weiwei Xu, Yin Yang, Huamin Wang

* and ** denote equal contribution

Table of Contents

NeRFs and Lighting

LightFormer: Light-Oriented Global Neural Rendering in Dynamic Scene ..... Article 75
Haocheng Ren, Yuchi Huo, Yifan Peng, Hongtao Sheng, Weidong Xue, Hongxiang Huang, Jingzhen Lan, Rui Wang, Hujun Bao

Eulerian-Lagrangian Fluid Simulation on Particle Flow Maps ..... Article 76
Junwei Zhou, Duowen Chen, Molin Deng, Yitong Deng, Yuchen Sun, Sinan Wang, Shiying Xiong, Bo Zhu

Lightning-fast Method of Fundamental Solutions ..... Article 77
Jiong Chen, Florian Schäfer, Mathieu Desbrun

Geometric Modeling & Analysis

Spin-It Faster: Quadrics Solve All Topology Optimization Problems That Depend Only On Mass Moments ..... Article 78
Christian Hafner, Mickaël Ly, Chris Wojtan

X-SLAM: Scalable Dense SLAM for Task-aware Optimization using CSFD ..... Article 79
Zhexi Peng, Yin Yang, Tianjia Shao, Chenfanfu Jiang, Kun Zhou

CWF: Consolidating Weak Features in High-quality Mesh Simplification ..... Article 80
Rui Xu, Longdu Liu*, Ningna Wang, Shuangmin Chen, Shiqing Xin, Xiaohu Guo, Zichun Zhong, Taku Komura, Wenping Wang, Changhe Tu*

Alignment conditions for NURBS-based design of mixed tension-compression grid shells ..... Article 81
Masaaki Miki, Toby Mitchell

Adaptive grid generation for discretizing implicit complexes ..... Article 82
Yiwen Ju, Xingyi Du, Qingnan Zhou, Nathan Carr, Tao Ju

3D People and Their Habitats

Spatial and Surface Correspondence Field for Interaction Transfer ..... Article 83
Zeyu Huang, Honghao Xu, Haibin Huang, Chongyang Ma, Hui Huang, Ruizhen Hu

CharacterGen: Efficient 3D Character Generation from Single Images with Multi-View Pose Canonicalization ..... Article 84
Hao-Yang Peng, Jia-Peng Zhang, Meng-Hao Guo, Yan-Pei Cao, Shi-Min Hu

* and ** denote equal contribution

Table of Contents

3D Fabrication

Neural Slicer for Multi-Axis 3D Printing ..... Article 85
Tao Liu, Tianyu Zhang*, Yongxue Chen, Yuming Huang, Charlie C. L. Wang*

FlexScale: Modeling and Characterization of Flexible Scaled Sheets ..... Article 86
Juan Montes Maestre, Yinwei Du*, Ronan Hinchet, Stelian Coros, Bernhard Thomaszewski*

Computational Homogenization for Inverse Design of Surface-based Inflatables ..... Article 87
Yingying Ren, Julian Panetta, Seiichi Suzuki, Uday Kusupati, Florin Isvoranu, Mark Pauly

Solid Knitting ..... Article 88
Yuichi Hirose, Mark Gillespie, Angelica M. Bonilla Fominaya, James McCann

Fabric Tessellation: Realizing Freeform Surfaces by Smocking ..... Article 89
Aviv Segall, Jing Ren, Amir Vaxman, Olga Sorkine-Hornung

Motion Capture

Audio Matters Too! Enhancing Markerless Motion Capture with Audio Signals for String Performance Capture ..... Article 90
Yitong Jin, Zhiping Qiu*, Yi Shi, Shuangpeng Sun, Chongwu Wang, Donghao Pan, Jiachen Zhao, Zhenghao Liang, Yuan Wang, Xiaobing Li, Feng Yu, Tao Yu, Qionghai Dai*

Shape Analysis

Differentiable Geodesic Distance for Intrinsic Minimization on Triangle Meshes ..... Article 91
Yue Li, Logan Numerow, Bernhard Thomaszewski, Stelian Coros

A Heat Method for Generalized Signed Distance ..... Article 92
Nicole Feng, Keenan Crane

3D Head Avatars From Data

Universal Facial Encoding of Codec Avatars from VR Headsets ..... Article 93
Shaojie Bai, Te-Li Wang, Chenghui Li, Akshay Venkatesh, Tomas Simon, Chen Cao, Gabriel Schwartz, Jason Saragih, Yaser Sheikh, Shih-En Wei

Learning a Generalized Physical Face Model From Data ..... Article 94
Lingchen Yang, Gaspard Zoss, Prashanth Chandran, Markus Gross, Barbara Solenthaler, Eftychios Sifakis, Derek Bradley

Real-Time Rendering: Hair, Fabrics, and Super-Resolution

Real-Time Physically Guided Hair Interpolation ..... Article 95
Jerry Hsu, Tongtong Wang, Zherong Pan, Xifeng Gao, Cem Yuksel, Kui Wu

* and ** denote equal contribution

Table of Contents

Rendering, Sampling and Tracing

Stylized Rendering as a Function of Expectation ..... Article 96
Rex West, Sayan Mukherjee

Proxy Tracing: Unbiased Reciprocal Estimation for Optimized Sampling in BDPT ..... Article 97
Fujia Su, Bingxuan Li*, QingYang Yin, Yanchen Zhang, Sheng Li*

Area ReSTIR: Resampling for Real-Time Defocus and Antialiasing ..... Article 98
Song Zhang, Daqi Lin*, Markus Kettunen, Cem Yuksel, Chris Wyman*

Ray Tracing Harmonic Functions ..... Article 99
Mark Gillespie, Denise Yang, Mario Botsch, Keenan Crane

Lighting and Matting With Image Generation

Transparent Image Layer Diffusion using Latent Transparency ..... Article 100
Lvmin Zhang, Maneesh Agrawala

Virtual Interaction and Real Devices

3D-Layers: Bringing Layer-Based Color Editing to VR Painting ..... Article 101
Emilie Yu, Fanny Chevalier, Karan Singh, Adrien Bousseau

NICER: A New and Improved Consumed Endurance and Recovery Metric
to Quantify Muscle Fatigue of Mid-Air Interactions ..... Article 102
Yi Li, Benjamin Tag, Shaozhang Dai, Robert Crowther, Tim Dwyer, Pourang Irani, Barrett Ens

Capacitive Touch Sensing on General 3D Surfaces ..... Article 103
Gianpaolo Palma, Narges Pourjafarian, Jürgen Steimle, Paolo Cignoni

Cloth Simulation

Progressive Dynamics for Cloth and Shell Animation ..... Article 104
Jiayi Eris Zhang, Doug L. James, Danny M. Kaufman

Super-Resolution Cloth Animation with Spatial and Temporal Coherence ..... Article 105
Jiawang Yu, Zhendong Wang

* and ** denote equal contribution

Table of Contents

3D Shape Analysis

DiffCAD: Weakly-Supervised Probabilistic CAD Model Retrieval and Alignment from an RGB Image ..... Article 106
Daoyi Gao, Dávid Rozenberszki, Stefan Leutenegger, Angela Dai

3Doodle: Compact Abstraction of Objects with 3D Strokes ..... Article 107
Changwoon Choi, Jaeah Lee, Jaesik Park, Young Min Kim

Split-and-Fit: Learning B-Reps via Structure-Aware Voronoi Partitioning ..... Article 108
Yilin Liu, Jiale Chen, Shanshan Pan, Daniel Cohen-Or, Hao Zhang, Hui Huang

Variational Feature Extraction in Scientific Visualization ..... Article 109
Nico Dassler, Tobias Günther

Implicit Swept Volume SDF: Enabling Continuous Collision-Free Trajectory Generation for Arbitrary Shapes ..... Article 110
Jingping Wang, Tingrui Zhang*, Qixuan Zhang, Chuxiao Zeng, Jingyi Yu, Chao Xu, Lan Xu, Fei Gao*

Appearance Models

A Fully-correlated Anisotropic Micrograin BSDF Model ..... Article 111
Simon Lucas, Mickaël Ribardière, Romain Pacanowski, Pascal Barla

From microfacets to participating media: A unified theory of light transport with stochastic geometry ..... Article 112
Dario Seyb, Eugene d'Eon, Benedikt Bitterli, Wojciech Jarosz

A Free-Space Diffraction BSDF ..... Article 113
Shlomi Steinberg, Ravi Ramamoorthi, Benedikt Bitterli, Arshiya Mollazainali, Eugene d'Eon, Matt Pharr

One Noise to Rule Them All: Learning a Unified Model of Spatially-Varying Noise Patterns ..... Article 114
Arman Maesumi, Dylan Hu, Krishi Saripalli*, Vladimir G. Kim, Matthew Fisher, Sören Pirk, Daniel Ritchie*

Simulating Deformation

Position-Based Nonlinear Gauss-Seidel for Quasistatic Hyperelasticity ..... Article 115
Yizhou Chen, Yushan Han, Jingyu Chen, Zhan Zhang, Alex McAdams, Joseph Teran

Vertex Block Descent ..... Article 116
Anka He Chen, Ziheng Liu, Yin Yang, Cem Yuksel

Simplicits: Mesh-Free, Geometry-Agnostic, Elastic Simulation ..... Article 117
Vismay Modi, Nicholas Sharp, Or Perel, Shinjiro Sueda, David I. W. Levin

A Neural Network Model for Efficient Musculoskeletal-Driven Skin Deformation ..... Article 118
Yushan Han, Yizhou Chen, Carmichael Ong, Jingyu Chen, Jennifer Hicks, Joseph Teran

* and ** denote equal contribution

Table of Contents

Generative 3D Geometry and Editing

BrepGen: A B-rep Generative Diffusion Model with Structured Latent Geometry ..... Article 119
Xiang Xu, Joseph G. Lambourne, Pradeep Kumar Jayaraman, Zhengqing Wang, Karl D.D. Willis, Yasutaka Furukawa

CLAY: A Controllable Large-scale Generative Model for Creating High-quality 3D Assets ..... Article 120
Longwen Zhang, Ziyu Wang*, Qixuan Zhang, Qiwei Qiu, Anqi Pang, Haoran Jiang, Wei Yang, Lan Xu, Jingyi Yu*

TIP-Editor: An Accurate 3D Editor Following Both Text-Prompts And Image-Prompts ..... Article 121
Jingyu Zhuang, Di Kang, Yan-Pei Cao, Guanbin Li, Liang Lin, Ying Shan

Mesh Neural Cellular Automata ..... Article 122
Ehsan Pajouheshgar, Yitao Xu*, Alexander Mordvintsev, Eyvind Niklasson, Tong Zhang, Sabine Süsstrunk*

Rendering, Denoising & Path Guiding

Temporally Stable Metropolis Light Transport Denoising using Recurrent Transformer Blocks ..... Article 123
Chuhao Chen, Yuze He, Tzu-Mao Li

Target-Aware Image Denoising for Inverse Monte Carlo Rendering ..... Article 124
Jeongmin Gu, Jonghee Back, Sung-Eui Yoon, Bochang Moon

Real-Time Path Guiding Using Bounding Voxel Sampling ..... Article 125
Haolin Lu, Wesley Chang, Trevor Hedstrom, Tzu-Mao Li

Specular Polynomials ..... Article 126
Zhimin Fan, Jie Guo, Yiming Wang, Tianyu Xiao, Hao Zhang, Chenxi Zhou, Zhenyu Chen, Pengpei Hong, Yanwen Guo, Ling-Qi Yan

Spin-Weighted Spherical Harmonics for Polarized Light Transport ..... Article 127
Shinyoung Yi, Donggun Kim, Jiwoong Na, Xin Tong, Min H. Kim

Perception, Image, Video

Theory of Human Tetrachromatic Color Experience and Printing ..... Article 128
Jessica Lee, Nicholas Jennings, Varun Srivastava, Ren Ng

ColorVideoVDP: A visual difference predictor for image, video and display distortions ..... Article 129
Rafał K. Mantiuk, Param Hanji, Maliha Ashraf, Yuta Asano, Alexandre Chapiro

Analogist: Out-of-the-box Visual In-Context Learning with Image Diffusion Model ..... Article 130
Zheng Gu, Shiyuan Yang, Jing Liao, Jing Huo, Yang Gao

Learning Images Across Scales Using Adversarial Training ..... Article 131
Krzysztof Wolski, Adarsh Djeacoumar, Alireza Javanmardi, Hans-Peter Seidel, Christian Theobalt, Guillaume Cordonnier, Karol Myszkowski, George Drettakis, Xingang Pan, Thomas Leimkühler

* and ** denote equal contribution

Table of Contents

Simulation With Contact

Contact detection between curved fibres: high order makes a difference ..... Article 132
Octave Crespel, Emile Hohnadel*, Thibaut Métivet, Florence Bertails-Descoubes*

Spatial Data Structures

fVDB: A Deep-Learning Framework for Sparse, Large-Scale, and High-Performance Spatial Intelligence ..... Article 133
Francis Williams, Jiahui Huang, Jonathan Swartz, Gergely Klár, Vijay Thakkar, Matthew Cong, Xuanchi Ren, Ruilong Li, Clement Fuji-Tsang, Sanja Fidler, Eftychios Sifakis, Ken Museth

Neural Gaussian Scale-Space Fields ..... Article 134
Felix Mujkanovic, Ntumba Elie Nsampi, Christian Theobalt, Hans-Peter Seidel, Thomas Leimkühler

Controllable Image Generation and Completion

RealFill: Reference-Driven Generation for Authentic Image Completion ..... Article 135
Luming Tang, Nataniel Ruiz, Qinghao Chu, Yuanzhen Li, Aleksander Hołyński, David E. Jacobs, Bharath Hariharan, Yael Pritch, Neal Wadhwa, Kfir Aberman, Michael Rubinstein

Character Animation: 2D, 3D, Robot

Semantic Gesticulator: Semantics-Aware Co-Speech Gesture Synthesis ..... Article 136
Zeyi Zhang, Tenglong Ao*, Yuyao Zhang, Qingzhe Gao, Chuan Lin, Baoquan Chen, Libin Liu*

Interactive Design of Stylized Walking Gaits for Robotic Characters ..... Article 137
Michael A. Hopkins, Georg Wiedebach*, Kyle Cesare, Jared Bishop, Espen Knoop, Moritz Bächer*

Geometry: Editing and Deformation

Biharmonic Coordinates and their Derivatives for Triangular 3D Cages ..... Article 138
Jean-Marc Thiery, Élie Michel, Jiong Chen

Curvature-Driven Conformal Deformations ..... Article 139
Etienne Corman

Repulsive Shells ..... Article 140
Josua Sassen, Henrik Schumacher, Martin Rumpf, Keenan Crane

Computational Cameras and Displays

Split-Aperture 2-in-1 Computational Cameras ..... Article 141
Zheng Shi, Ilya Chugunov*, Mario Bijelic, Geoffroi Côté, Jiwoon Yeom, Qiang Fu, Hadi Amata, Wolfgang Heidrich, Felix Heide*

* and ** denote equal contribution

Table of Contents

Character Control

Categorical Codebook Matching for Embodied Character Controllers ..... Article 142
Sebastian Starke, Paul Starke, Nicky He, Taku Komura, Yuting Ye

Interactive Character Control with Auto-Regressive Motion Diffusion Models ..... Article 143
Yi Shi, Jingbo Wang, Xuekun Jiang, Bingkun Lin, Bo Dai, Xue Bin Peng

MoConVQ: Unified Physics-Based Motion Control via Scalable Discrete Representations ..... Article 144
Heyuan Yao, Zhenhua Song, Yuyang Zhou, Tenglong Ao, Baoquan Chen, Libin Liu

Procedural Geometry

Terrain Amplification using Multi-scale Erosion ..... Article 145
Hugo Schott, Eric Galin, Eric Guérin, Adrien Peytavie, Axel Paris

Interactive Invigoration: Volumetric Modeling of Trees with Strands ..... Article 146
Bosheng Li, Nikolas A. Schwarz, Wojtek Pałubicki, Sören Pirk, Bedrich Benes

Surface-Filling Curve Flows via Implicit Medial Axes ..... Article 147
Yuta Noma, Silvia Sellán, Nicholas Sharp, Karan Singh, Alec Jacobson

Radiance Field Processing

Bilateral Guided Radiance Field Processing ..... Article 148
Yuehao Wang, Chaoyi Wang, Bingchen Gong, Tianfan Xue

Binary Opacity Grids: Capturing Fine Geometric Detail for Mesh-Based View Synthesis ..... Article 149
Christian Reiser, Stephan Garbin, Pratul P. Srinivasan, Dor Verbin, Richard Szeliski, Ben Mildenhall, Jonathan T. Barron, Peter Hedman, Andreas Geiger

TensoSDF: Roughness-aware Tensorial Representation for Robust Geometry and Material Reconstruction ..... Article 150
Jia Li, Lu Wang, Lei Zhang, Beibei Wang

Sound, Light, Radiofrequency

Cricket: A Self-Powered Chirping Pixel ..... Article 151
Shree K. Nayar, Jeremy Klotz, Nikhil Nanda, Mikhail Fridberg

Art, Illusion, Fabrication

Computational Illusion Knitting ..... Article 152
Amy Zhu, Yuxuan Mei, Benjamin Jones, Zachary Tatlock, Adriana Schulz

Creating LEGO™ Figurines from Single Images ..... Article 153
Jiahao Ge, Mingjun Zhou, Wenrui Bao, Hao Xu, Chi-Wing Fu

Technical Papers Committee xv
Technical Papers Reviewers xvii
Cover Image Credits xvii
Author Index xviii

* and ** denote equal contribution

Preface

We are pleased to introduce the special issue of TOG and SIGGRAPH Conference Proceedings which include all papers accepted to the SIGGRAPH 2024 conference. This year, we received an extraordinary 844 submissions, a 36% increase over last year. The Technical Papers Committee (PC), composed of 121 experts from academia and industry, accepted 252 of the submissions: 118 as Journal papers and 134 as Conference papers, resulting in an overall acceptance rate of 30%. As in previous years, papers were submitted either as Journal-only (no page limit) or dual-track (page limit of 7 pages, with 2 additional pages for figures). There were 192 journal-only and 652 dual-track submissions. In addition to these papers, the Technical Papers program will include 27 papers accepted to other issues of TOG, totaling 279 presentations—double the number in 2019.

The themes of the papers presented at SIGGRAPH continue to evolve, showcasing exciting advances in well-established computer graphics research directions and exploration of novel applications, in particular, based on generative AI. The advances in AI have expanded the range of topics shared between computer vision and computer graphics, accounting for a significant portion of the growth in submissions.

This extraordinary growth, while promising for the future of SIGGRAPH, comes with challenges: assembling a 121-person committee is difficult and leaves fewer people available for the SIGGRAPH Asia committee. Consequently, the next SIGGRAPH and SIGGRAPH Asia chairs and the Papers Advisory Group (PAG) decided to make some modifications to the review process for the future. This year, the review process largely remained the same—well-tuned and thorough—with some small enhancements. However, this is likely the last year in the near future when we can afford not to reduce the number of reviews per paper.

This year, we introduced an additional pre-review meeting of the Technical Papers Committee, held around the time of the sorting committee meeting, to review and discuss the review criteria and policies before the reviews began. Another new feature is a more definitive policy on comparison requests in reviews and the definition of prior work.
As in previous years, the process remained double-blind, with five reviews per paper. We switched to a single score (from strong reject to strong accept) for dual-track papers, with a separate question about conference vs. dual paper acceptance. A refined description of the differences between conference and journal papers was included in the CFP and committee guidance. Nevertheless, many discussions focused on this distinction, sometimes distracting from the merits of the papers themselves.
Most experienced members of the committee agreed to serve as Moderators, who helped facilitate post-rebuttal reviewer discussions and provide feedback on review summaries. This year, the moderator role was particularly important: the committee meeting duration (3 days) is fixed, but decisions need to be made on an increasing number of papers, making it crucial to converge on decisions before the meeting. To improve the quality of feedback provided to authors, we worked to provide detailed instructions on summary content and structure, particularly for rejected papers.

Since 2020, the Technical Papers Committee meetings have been virtual, and this year was no exception. Although we briefly considered returning to in-person meetings, it was not feasible given the committee size. Virtual meetings have their own set of challenges. This year, the videoconferencing system used in 2021-2023 (Ohyay) was terminated by its owner, Snap, so we switched to a Zoom-based system developed by Kayvon Fatahalian.

Preface

Serving as the technical papers chairs gave us a new appreciation for the scale of the effort and the incredible work done by all volunteers and staff members. Our sincere gratitude goes to the many participants in the process:

* Leona Caffey for patiently guiding us through the process and providing unparalleled support at every step, handling countless aspects of the program.
* Leona's colleagues at SmithBucklin, Brenda Dreier, Mandie Aadland, and Emma Siemsen, for their help during the meeting.
* Mark Montague for implementing new features, extracting needed information from Linklings on short notice, and coming up with creative solutions to various problems.
* Adam Finkelstein for making numerous changes to HepCat to accommodate the new meeting format and working with Kayvon to integrate it with the new Zoom app.
* Kayvon Fatahalian for building the Ohyay replacement, figuring out the endless idiosyncrasies of the Zoom API, and running it during the committee meeting.
* The paper's video team, Derek Bradley, Jim McCann, Enrique Rosales, and Nicholas Vining, for putting the trailer together, and the student volunteers (Ryan Capouellez, Arvi Gjoka, Juhyeon Kim, Abhishek Madan, Jonathan Panuelos, Ty Mason Trusty, Zhecheng Wang) for selecting the videos.
* The 15 sorters who assigned all 844 submissions to 121 committee members in 2 days.
* The 121 papers committee members who worked hard to find reviewers for all submissions, which is becoming increasingly difficult as the number of submissions grows, and for making decisions on all papers in a 3-day meeting.
* The 29 Conflict of Interest Coordinators who had to do more work than expected.
* The 1416 tertiary reviewers who, along with committee members, wrote 3531 reviews.
* The Advisory Board and the Papers Advisory Group and its Chair, George Drettakis, for providing timely input on a range of topics.
* The Test-of-Time Awards Committee and the Best Paper Awards Committee, and Sylvain Paris and Richard Zhang for chairing these committees.

In conclusion, we are very proud of the quality and breadth of the SIGGRAPH 2024 Technical Papers program. Despite the challenges posed by our growth, the dedication and hard work of the Technical Papers Committee, reviewers, and all involved have ensured that SIGGRAPH continues to be a premier venue for groundbreaking research. We are optimistic about the future of SIGGRAPH, confident that it will continue to thrive and adapt, setting new standards for excellence in the years to come.

Denis Zorin
Technical Papers Chair

Wojciech Jarosz
Technical Papers Assistant Chair