



# ACM SIGGRAPH IRC

International Resources Committee



## INTERNATIONAL CONNECTION



*Throughout the year, the International Resources program facilitates worldwide collaboration in the ACM SIGGRAPH community. Because of our international connections and close relationship to the international ACM SIGGRAPH Chapters, we are often able to connect people and resources across the world. Please contact us if you are interested in connecting with ACM SIGGRAPH Chapters and/or professionals in the field of graphics and interactive techniques.*

*For SIGGRAPH2012 conference, we have prepared this document, which highlights all conference submissions and presentations from the United States and Canada. If you have questions about this list, please contact our 'USA + Canada' committee members:*

*Vicky Fowler [vicky.fowler1@gmail.com]*

*Torrey Nommesen [torrey@nommesen.com]*

-----

### **Art Gallery**

#### **Canada**

Biopoiesis

Carlos Castellanos (DPrime Research)

The Heartbeats Watch

Julie Legault (V2\_ Institute for the Unstable Media)

#### **USA**

Saturation

Daniel Barry (University at Buffalo)

Adam Laskowitz (University at Buffalo)

### **Art Papers**

#### **USA**

Translation + Pendaphonics = Movement Modulated Media

Byron Lahey (Arizona State University)

Winslow Burleson (Arizona State University)

Elizabeth Streb (The STREB Extreme Action Company)

### **Awards**

#### **USA**

Greg Turk (Georgia Institute of Technology)

Karen Liu (Georgia Institute of Technology)

Jean-Pierre Hébert (University of California, Santa Barbara)

David Kasik (The Boeing Company)

### **Birds of a Feather**

#### **Canada**

Deliberate Practice Makes Perfect - 10,000 Hours to Expertise

Terry Posthumus

Teaching Procedural Workflows  
Bill Dwelly

Animation: From Visual Development to Art Direction  
Mario Pochat Vancouver Animation School

## USA

Studio Views of Demo Reels  
Art Durinski

Teaching OpenGL in a Post-Deprecation World  
Khronos Institute for Training and Education (KITE) for Educators  
Mike Bailey

Exploring Software Delivery and Pipeline Choices for Students in the Cloud  
John Reinhard

ASIFA-Hollywood Animation Educators Forum  
Dori Littell-Herrick

Animation and 21st Century Skills  
The ACME Network

Undergraduate Research Alliance  
William J. Joel

Teaching Artists to Program With Algorithmic Art  
Genevieve Orr

Hacking Objects: An Exploration in Rule Breaking  
Assemble, a community space for arts + technology

LA ACM SIGGRAPH Chapter Social  
Leonard Daly

Collaboration Between Education and Industry: The New Model  
Vince De Quattro

San Francisco ACM SIGGRAPH Meeting  
Tereza Flaxman

Purdue University Birds of a Feather  
Ray Hassan Purdue University

University of Pennsylvania and ETH Zürich Reception  
Norman Badler

## Chapters

### Canada

Vancouver ACM SIGGRAPH

Kitchener/Waterloo ACM SIGGRAPH

Montreal ACM SIGGRAPH

### USA

Cascade ACM SIGGRAPH

Fort Lauderdale ACM SIGGRAPH

Los Angeles ACM SIGGRAPH

Minneapolis/St Paul ACM SIGGRAPH

NYC ACM SIGGRAPH

Orlando ACM SIGGRAPH

San Diego ACM SIGGRAPH

San Francisco ACM SIGGRAPH

Silicon Valley ACM SIGGRAPH

Drexel University ACM SIGGRAPH

Texas A&M University ACM SIGGRAPH

### **Computer Animation Festival (CAF)**

Canada

"Little Talks" - Of Monsters and Men  
WeWereMonkeys

USA

Aquatic Bloom  
Subject Code Q80-203  
School of Visual Arts

Karma  
School of Visual Arts

Encounter  
School of Visual Arts

Ramus  
School of Visual Arts

Void  
School of Visual Arts

Brother  
School of Visual Arts

Getaway  
School of Visual Arts

Dynamic Earth Visualization Excerpt  
Evolution of the Moon  
NASA

La Lune Et Le Coq  
Rochester Institute of Technology

DOTA 2 Teaser  
Valve

The Girl with the Dragon Tattoo - 2011  
Prey 2  
Blur Studio, Inc.

Tour of the Moon  
Universities Space Research Association

Restless Visual FX  
Coke: "Spirit of the Euro"  
Grimm Visual FX  
Bent Image Lab

Dynamic Earth: "Hurricane Katrina"  
NCSA, University of Illinois

Ruin  
OddBall Animation

Fertilization  
Nucleus Medical Media

My Little Friend  
Ringling College of Art and Design

The Colors of Evil  
Ringling College of Art and Design

Bon Iver "We Are Music "  
Moving Picture Company

Estefan  
Brigham Young University

Dilated Pixels Episodic Television VFX 2011-12  
Dilated Pixels

How To Eat Your Apple  
Pixar Animation Studios

## **CAF Production Sessions**

### **USA**

Pixomondo Presents Hugo  
Ben Grossman (Pixomondo)

Assembling the VFX for Marvel's "The Avengers"  
Victoria Alonso (Marvel Studios)

Building Disney•Pixar's "Brave"  
Colin Thompson (Disney-Pixar)

Digital Domain Presents "Making the Steel Real"  
Erik Nash (Digital Domain)

LAIKA's ParaNorman  
Brian Van't Hul (LAIKA)

High-Frame-Rate Cinema  
Paul Salvini (Christie Digital Systems USA, Inc.)

Industrial Light & Magic Presents: The Visual Effects of "Battleship"  
Grady Cofer (Industrial Light and Magic)

Balancing Act: Life as a Visual Effects Supervisor at DreamWorks Animation  
Ken Bielenberg (Dreamworks Animation)

The Art and Science Behind Walt Disney Animation Studios' "Paperman"  
John Kahrs (Walt Disney Animation Studios)

## **Courses**

Canada

Practical Physically-Based Shading in Film and Game Production  
Stephen McAuley (Ubisoft Montréal)

## USA

Fundamentals Seminar  
Mike Bailey (Oregon State University)

Computational Displays  
Gordon Wetzstein (MIT Media Lab)

Principles of Animation Physics  
Alejandro Garcia (San Jose State University)

State-of-the-Art Stereoscopic Visual Effects  
Jonathan Karafin (Digital Domain)

The Invisible Art  
Craig Barron (Matte World Digital)

Computational Aesthetic Evaluation  
Philip Galanter (Texas A&M University)

Introduction to Modern OpenGL  
Edward Angel (University of New Mexico)

Virtual Texturing in Software and Hardware  
Beyond Programmable Shading  
Juraj Obert (AMD)

Cinematic Color  
Jeremy Selan (Sony Pictures Imageworks)

Character Rigging and Creature Wrangling  
Tim McLaughlin (Texas A&M University)

FEM Simulation of 3D Deformable Solids  
Eftychios Sifakis (University of Wisconsin-Madison)

GPU Shaders for OpenGL 4.x  
Mike Bailey (Oregon State University)

Advanced (Quasi) Monte Carlo Methods for Image Synthesis  
Alexander Keller (NVIDIA ARC)

Graphics Programming for the Web  
Pushkar Joshi (Motorola Mobility)

## Emerging Technologies

### Canada

HDRchitecture  
Raymond Lo (University of Toronto)

### USA

Combiform  
Edmond Yee (University of Southern California)

Interactive Light-Field Painting  
James Tompkin (Disney Research, Boston)

Mood Meter  
Javier Hernandez (MIT Media Lab)

REVEL  
Olivier Bau (Disney Research, Pittsburgh)

Tavola  
Yue Fei (Panasonic Silicon Valley Laboratory)

Tensor Displays  
Matthew Hirsch (MIT Media Lab)

## **Exhibitors**

### **Canada**

3D3 Solutions  
Autodesk, Inc.  
British Columbia Film Commission  
cebas Visual Technology Inc.  
Christie Digital Systems  
Montreal ACM SIGGRAPH  
NorPix Inc  
Ontario Canada Delegation  
Peer 1 Hosting  
Point Grey Research, Inc.  
Ross Video Limited  
Scalar Decisions  
Toon Boom Animation Inc.  
VanArts  
Vancouver Animation Inc.  
Vancouver Film School

### **USA**

3D Systems  
3Dconnexion, Inc.  
3dMD  
3DVIA  
Academy of Art University  
Addison-Wesley/Pearson  
Advanced Micro Devices, Inc.  
American Express OPEN  
Andersson Technologies LLC  
Animation Magazine Inc.  
AnimSchool  
ASC-American Cinematographer  
Avere Systems  
Axceleon Inc.  
BOXX Technologies, Inc.  
Cogswell College  
Computer Graphics World  
CRC Press/AK Peters  
CyberGlove Systems  
DAZ 3D  
DePaul University College of Computing and Digital Media  
DigiPen Institute of Technology  
Digital Domain  
EDGE 3 Technologies, Inc.  
Elphel, Inc.  
EMC Isilon  
Epson America Inc.  
Esri  
Focal Press/Morgan Kaufmann  
Fusion-io  
Hall-Erickson, Inc.  
Hitachi Data Systems  
IATSE  
IEEE Computer Society  
Infinite Z  
IntegrityWare, Inc.  
Intel Corporation  
John Wiley & Sons, Inc.  
JourneyEd  
Just Cause Entertainment  
Khronos Group  
Lightcraft Technology  
Luxion, Inc.  
Luxology, LLC  
MAXON Computer  
Microway, Inc.  
Motion Analysis Corporation

Natural Point  
NEC Display Solutions  
NewTek, Inc.  
NextEngine Inc.  
NVIDIA Corporation  
Objet Geometries Inc.  
OC3 Entertainment  
OPTIS SAS  
Organic Motion, Inc.  
PipelineFx, LLC  
Pixar Animation Studios  
Pixologic, Inc.  
PNY Technologies  
Pond5, Inc.  
Prime Focus World  
Purdue University  
Rate a Reel, LLC  
Ringling College of Art and Design  
Savannah College of Art and Design  
Scanline VFX  
Shapeways  
Shotgun Software, Inc.  
Side Effects Software  
Smith Micro Software  
SoftEther Corporation  
SpeedTree  
Springer  
Steinbichler Vision Systems, Inc.  
Stratasys 3D Printers & Production Systems  
Studica, Inc.  
Tandent Vision Science, Inc.  
The University of the Arts  
The3DShop.com  
Thinkbox Software Inc.  
Tobii Technology Inc.  
Topaz Labs  
Trinity3D.com  
Tukatech, Inc.  
Unity Technologies  
VanGogh Imaging  
Vicon  
Wacom Technology Services, Corp.  
Web3D Consortium  
Western Digital  
WorldViz  
Z Corporation  
Zygo Media Group, Inc.

## **Keynote**

### **USA**

Jane McGonigal (SuperBetter Labs)

## **Panels**

### **USA**

The Battle for Motion-Controlled Gaming and Beyond  
Jason Jerald (Digital ArtForms, Inc.)

Virtual Production Branches Out  
Matt Aitken (Weta Digital)

## **Posters**

### **Canada**

Using Motion Capture to Manipulate and Edit Meshes  
Joe Istead (University of Western Ontario)

## USA

### 8D Display

Matthew Hirsch (MIT Media Lab)

### A Cell-Phone Platform for Facial Performance Capture

Svetlana Akim (USC)

### A Dynamic System for Controlling the Head Movement and Gaze of Virtual Characters

Timothy Gifford (University of Connecticut)

### A Motion-Sensor Interactive Interface for Viewing and Manipulating Protein Structural Data in 3D

Robyn Moncrief (Oklahoma State University)

### Calligraphic Cutting

Youyou Wang (Texas A&M University)

### CoDAC

Andrea Colaco (Massachusetts Institute of Technology)

### Compressive Light-Field Photography

Kshitij Marwah (MIT Media Lab)

### Computational Cellphone Microscopy

Aydin Arpa (MIT Media Lab)

### Computational Retinal Imaging Via Binocular Coupling and Indirect Illumination

Everett Lawson (MIT Media Lab)

### Design Ornamentation & Fabrication by Multi-Agent System

Subhajit Das (University of Pennsylvania)

### Estimating Diffusion Parameters From Polarized Spherical Gradient Illumination

Yufeng Zhu (USC)

### Image-Based Smartphone Interaction With Large High Resolution Displays

Jurgen Schulze (UCSD)

### Improving Registration Using Active Shape Models and Depth

Colin Bellmore (Rochester Institute of Technology)

### Measurement-Based Synthesis of Facial Microgeometry

Paul Graham (USC Institute for Creative Technologies)

### Non-Rigid Shape Correspondence and Description Using Geodesic Field Estimate Distribution

Anirban Mukhopadhyay (University of Georgia)

### Perifoveal Display

Valentin Heun (MIT Media Lab)

### SEAD - Network for Sciences, Engineering, Arts, and Design

Sheldon Brown (UCSD)

### SketchGraph

Jacquelyn Martino (IBM Research)

### Sketching Knots

Ergun Akleman (Texas A&M University)

### Tongue Visualization for Specified Speech Task

Yin Yang (University of Texas at Dallas)

### Transparent

Arlene Ducao (MIT Media Lab)

### Turning Photographs Into Abstract Expressionist Paintings

Youyou Wang (Texas A&M University)

### Use of CUDA Streams for Block-Based MPEG Motion Estimation on the GPU

Mai El-Shehaly (Virginia Polytechnic Institute and State University)

## Real-Time Live!

## USA

ARCADE: A System for Augmenting Gesture-Based Computer Graphic Presentations



Murphy Stein (New York University)

Brigade  
Sam Lapere (OTOY, Inc.)

Leo  
Abraham Wiley (AMD)

Star Wars 1313  
Roger Cordes (LucasArts)

Uncharted 3 Visual Effects  
Doug Holder (Naughty Dog Inc.)

Unreal Engine 4 Elemental  
Andrew Scheidecker (Epic Games, Inc.)

## **SIGGRAPH Dailies!**

### **USA**

Digital Decay  
Bruce Wright (Walt Disney Animation Studios)

French Toast & Bugzilla  
Ann McNamara and Students (Texas A&M University)

Do Try This at Home  
Drew Skillman (Double Fine Productions)

The Sky is Falling!  
Kel Elkins (Analytical Graphics, Inc.)

Ghaaaaat Miiiiiiilk  
Robert Chen (DreamWorks Animation)

Eggceptional Faberge  
Sarah McGee (Zoic Studios)

Poetic Plumes  
Scott Keating (Side Effects Software Inc.)

Snake Attack  
Fangwei Lee (DreamWorks Animation)

Mortal Kombat Morphing  
Jon Greenberg (NetherRealm Studios)

Silence  
Kevan Loney (Texas A&M University)

Blast, Off?  
Kel Elkins (Analytical Graphics, Inc.)

Creamed!  
Kyle Maxwell (DreamWorks Animation)

Putting Pleasing Pixels on "Paperman"  
Amol Sathe (Walt Disney Animation Studios)

Animated Still Life  
Ergun Akleman (Texas A&M University)

Mandible & Goldblum  
Ann McNamara and Students (Texas A&M University)

Flopping Fish  
Greg Gladstone (DreamWorks Animation)

## **SIGGRAPH Mobile**

### **USA**

Panel - Mobile GPUs: Markets and Technology  
Peter Glaskowsky (Microsoft Corporation)  
Dan Wexler (The 11ers)  
Dave Shreiner (ARM, Inc.)  
Eric Demers (Qualcomm Incorporated)

Saving the Planet, One Handset at a Time: Designing Low-Power, Low-Bandwidth GPUs  
Thomas Olson (ARM Ltd)

Unity: iOS and Android - Cross-Platform Challenges and Solutions  
Renaldas Zioma (Unity Technologies)

Novel Approaches to GPU Performance Analysis  
Karthik Hariharakrishnan (ARM Ltd)

Auto(mobile)  
Vidya Setlur (Nokia Research Center)

## **Studio**

### **USA**

Introducing Processing 2.0  
Andres Colubri (Harvard University and Fathom Information Design)

Exploring Algorithmic Geometry Using "Beetle Blocks"  
Duks Koschitz (Massachusetts Institute of Technology)

RhythmSynthesis  
Ryan Raffa (Parsons The New School for Design)

Automatic Lead-Sheet Visualization for Musical Study  
Douglas Mason (Harvard University)

AudioCloning: Extracting Material Fingerprints from Example Audio Recording  
Hengchin Yeh (University of North Carolina at Chapel Hill)

Magic Beanstalk Ride in "Puss In Boots"  
Amaury Aubel (DreamWorks Animation SKG)

Conquering the Seas of "Ice Age: Continental Drift "  
Mark Adams (Blue Sky Studios)

River Running Through It  
Michael O'Brien (Pixar Animation Studios)

Creating Vast Game Worlds - Experiences From Avalanche Studios  
Emil Persson (Avalanche Studios)

Get Real! Automated Methods for Rapid Prototyping and Industrial Design  
Martin Wicke (Otherlab)

Now That We Have Desktop 3D Printers, The Revolution Can Begin  
Matthew Griffin (MakerBot Industries, LLC)

DIYLILCNC v2.0  
Chris Reilly (UCLA)

Virtual Cane Creation for Glassblowers

Andrew Winslow (Tufts University)

SketchGraph: Gestural Data Input for Mobile Tablet Devices  
Jacquelyn Martino (IBM Corporation)

Public Displays of Computing: Space, Place, and Computing  
Eric Sauda (University of North Carolina at Charlotte)

Interactive Modeling With Mesh Surfaces  
Ryan Schmidt (Autodesk Research)

Gigapixel Science Lab  
Gene Cooper (Four Chambers Studio)

Body Monitoring: Exploring the Creative Uses of Invasive Technologies  
Julie Legault (Royal College of Art)

Material is Expensive, But Complexity is Free  
Charles Overy (Laser Graphic Manufacturing)

Presenting Mojito  
William Edney (Yahoo! Inc.)

ZBrush: Artists Without Borders  
Paul Gaboury (Pixologic, Inc.)

Signal Strength: Activist Networking Techniques  
Amelia Marzec (Eyebeam Art)

Making Your Own Avatar  
Ketrina Yim (PhaseSpace Inc.)

Intro to Arduino  
Smart Lighting With Arduino  
Alejandro Borsani (Rensselaer Polytechnic Institute)

## Talks

### Canada

Lighting the Open World of New York Zero for Prototype 2  
Keith O'Connor (Radical Entertainment)

Screen Space Decals in Warhammer 40,000: Space Marine  
Pope Kim (Relic Entertainment)

### USA

Asking the Impossible on SSX: Creating 300 Tracks on a 10-Track Budget  
Caleb Howard (Electronic Arts and Cognitive Imaging Corporation)

Point-Based Global Illumination Directional Importance Mapping  
Eric Tabellion (PDI/DreamWorks)

Character Design: Visual Complexity in "Brave"  
Curls Gone Wild: Hair Simulation in "Brave"  
Simulation Preview in "Brave"  
Ill-Loom-inating Handmade Fabric in "Brave"  
Building the Snow Footprint Pipeline on "Brave"  
Olivier Soares (Pixar Animation Studios)  
Jacob Speirs (Pixar Animation Studios)  
Alexander Nehls (Pixar Animation Studios)  
Philip Child (Pixar Animation Studios)

Cloud Modeling And Rendering for "Puss In Boots"  
Brett Miller (DreamWorks Animation)

A World of Voxels: The Volumetric Effects of "Ice Age: Continental Drift"  
Making Tracks: Footprints in the "Ice Age" Movies  
Andrew Schneider (Blue Sky Studios)

Vortex of Awesomeness  
Can Yuksel (DreamWorks Animation)

Efficient and Seamless Volumetric Fracturing  
Mihai Alden (DreamWorks Animation)

Estimating Specular Normals From Spherical Stokes Reflectance Fields  
Giuseppe Claudio Guarnera (USC Institute for Creative Technologies)

Estimating Diffusion Parameters From Polarized Spherical Gradient Illumination  
Yufeng Zhu (University of Southern California)

Measurement-Based Synthesis of Facial Microgeometry  
Paul Graham (USC Institute for Creative Technologies)

A Single-Shot Light Probe

Paul Graham (USC Institute for Creative Technologies)

From a Calm Puddle to a Stormy Ocean: Rendering Water in Uncharted

Carlos Gonzalez-Ochoa (Naughty Dog, Inc.)

What if the Earth Was Flat: The Globe UI System in SSX

Qing Shen (Electronic Arts)

Introducing Processing 2.0

Andres Colubri (Harvard University and Fathom Information Design)

Janak Bhimani (Keio University)

Adapting Curriculum to Explore New 3D Modeling Technologies and Workflows

Shaun Foster (Rochester Institute of Technology)

Headstrong, Hairy, and Heavily Clothed

Paul Kanyuk (Pixar Animation Studios)

Hero-Quality Crowds in "Madagascar 3: Europe's Most Wanted"

Nathaniel Dirksen (DreamWorks Animation)

LibEE: A Multithreaded Dependency Graph for Character Animation

Martin Watt (Dreamworks Animation)

Crom - Massively Parallel, CPU/GPU Hybrid Computation Platform for Visual Effects

John Vanover (Rhythm & Hues Studios, Inc.)

Amorphous: An OpenGL Sparse Volume Renderer

Mark Matthews (DreamWorks Animation)

Efficient Large-Scale Hybrid Fluid Simulation

Abhinav Golas (University of North Carolina at Chapel Hill)

KinÊtre: Animating the World With the Human Body

Jiawen Chen (Microsoft Research Cambridge)

Computational Retinal Imaging via Binocular Coupling and Indirect Illumination

Everett Lawson (MIT Media Lab)

Relativistic Ultrafast Rendering Using Time-Resolved Imaging

Andreas Velten (University of Wisconsin)

Compressive Light-Field Photography

Kshitij Marwah (MIT Media Lab)

Computer-Assisted Animation of Line and Paint in Disney's "Paperman"

Brian Whited (Walt Disney Animation Studios)

Stable, Art-Directable Skin and Flesh Using Biphasic Materials

Ryan Kautzman (Pixar Animation Studios)

"Wrath Of The Titans" - Complex Models With Voxel Greeble

Daniel Seddon (Method Studios)

Multiresolution Radiosity Caching for Global Illumination in Movies

Per Christensen (Pixar Animation Studios)

dRig: An Artist-Friendly, Object-Oriented Approach to Rig Building

Gregory Smith (Walt Disney Animation Studios)

Importance Sampling for Hair Scattering

Jiawei Ou (Dartmouth College/DreamWorks Animation)

Adaptive Noise Reduction for Progressive Photon Mapping

Zhe Fu (University of California, San Diego)

Progressive Volume Photon Tracing  
Charly Collin (University of Central Florida)

Volume-Aware Extinction Mapping  
Pascal Gautron (Technicolor Research & Innovation)

Fast Generation of Directional Occlusion Volumes  
Andrew Willmott (Electronic Arts Inc.)

Art Pipeline: Transition From Offline to Real-Time CG  
Renaldas Zioma (Unity Technologies)

High-Fidelity Facial Hair Capture  
Graham Fyffe (USC Institute for Creative Technologies)

Furry, Fuzzy, Lovable: Once Upon a Monster's Fur Pipeline  
Peter Demoreuille (Google Inc.)

Crowd Sourcing Memory Colors For Image Enhancement  
Su Xue (Yale University)

Calligraphic Cutting: Extreme Image Resizing With Cuts in Continuous Domain  
Youyou Wang (Texas A&M University)

Building Interior Multi-Panorama Experiences at Scale  
Mark Colbert (Google Inc.)

CoDAC  
Andrea Colaco (Massachusetts Institute of Technology)

## Technical Papers

### Canada

Primal-Dual Coding to Probe Light Transport  
Matthew O'Toole (University of Toronto)

Eyecatch: Simulating Visuomotor Coordination for Object Interception  
Sang Hoon Yeo (The University of British Columbia)

CrossShade: Shading Concept Sketches Using Cross-Section Curves  
Cloud Shao (University of Toronto)

Stochastic Tomography and Its Applications in 3D Imaging of Mixing Fluids  
James Gregson (The University of British Columbia)

Ghost SPH for Animating Water  
Hagit Schechter (The University of British Columbia)

MultiFLIP for Energetic Two-Phase Fluid Simulation  
Landon Boyd (The University of British Columbia)

Efficient Geometrically Exact Continuous Collision Detection  
Tyson Brochu (The University of British Columbia)

Sparse Zonal Harmonic Factorization for Efficient SH Rotation  
Derek Nowrouzezahrai (Université de Montréal)

Fluid Simulation Using Laplacian Eigenfunctions  
Tyler de Witt (University of Toronto)

### USA

Optimizing Locomotion Controllers Using Biologically Based Actuators and Objectives  
Jack M. Wang (Stanford University)

Soft Body Locomotion

Jie Tan (Georgia Institute of Technology)

Video-Based 3D Motion Capture Through Biped Control

Marek Vondrak (Brown University)

Continuous Character Control With Low-Dimensional Embeddings

Sergey Levine (Stanford University)

Schelling Points on 3D Surface Meshes

Xiaobai Chen (Princeton University)

Specular Reflection From Woven Cloth

Piti Irawan (Cornell University)

DRAPE : DRessing Any PErson

Peng Guan (Brown University)

Stitch Meshes for Modeling Knitted Clothing With Yarn-level Detail

Cem Yuksel (Cornell University)

Decoupling Algorithms From Schedules for Easy Optimization of Image-Processing Pipelines

Jonathan Ragan-Kelley (Massachusetts Institute of Technology)

High-Quality Image Deblurring With Panchromatic Pixels

Sen Wang (Eastman Kodak Company)

3D Imaging Spectroscopy for Measuring 3D Hyperspectral Patterns on Solid Objects

Min H. Kim (Yale University)

Fast High-Resolution Appearance Editing Using Superimposed Projections

Daniel E. Aliaga (Purdue University)

Printing Reflectance Functions

Thomas Malzbender (Hewlett-Packard Laboratories)

Synthesis of Detailed Hand Manipulations Using Contact Sampling

Yuting Ye (Georgia Institute of Technology)

Discovery of Complex Behaviors through Contact-Invariant Optimization

Igor Mordatch (University of Washington)

Three-Dimensional Proxies for Hand-Drawn Characters

Eakta Jain (Carnegie Mellon University)

Learning Hatching for Pen-and-Ink Illustration of Surfaces

Evangelos Kalogerakis (Stanford University)

HelpingHand: Example-Based Stroke Stylization

Jingwan Lu (Princeton University)

Fabricating Articulated Characters From Skinned Meshes

Moritz Bächer (Harvard University)

Stress Relief: Improving Structural Strength of 3D Printable Objects

Ondrej Stava (Purdue University)

A Theory of Monte Carlo Visibility Sampling

Ravi Ramamoorthi (University of California, Berkeley)

Theory, Analysis, and Applications of 2D Global Illumination

Wojciech Jarosz (University of California, San Diego)

Reconstructing the Indirect Light Field for Global Illumination

Jaakko Lehtinen (NVIDIA Research)

Manifold Exploration: A Markov Chain Monte Carlo Technique for Rendering Scenes With Difficult Specular Transport  
Wenzel Jakob (Cornell University)

Bidirectional Lightcuts  
Bruce Walter (Cornell University)

Animating Bubble Interactions in a Liquid Foam  
Oleksiy Busaryev (The Ohio State University)

Exploring Collections of 3D Models Using Fuzzy Correspondence  
Vladimir G. Kim (Princeton University)

A Probabilistic Model for Component-Based Shape Synthesis  
Evangelos Kalogerakis (Stanford University)

Synthesizing Open Worlds With Constraints Using Locally Annealed Reversible Jump MCMC  
Yi-Ting Yeh (Stanford University)

Interactive Editing of Deformable Simulations  
Jernej Barbic (University of Southern California)

Fast Simulation of Skeleton-Driven Deformable Body Characters  
Junggon Kim (Carnegie Mellon University)

Eulerian Video Magnification for Revealing Subtle Changes in the World  
Hao-Yu Wu (Massachusetts Institute of Technology)

Selectively De-Animating Video  
Jiamin Bai (University of California, Berkeley)

Tools for Placing Cuts and Transitions in Interview Video  
Floraine Berthouzoz (University of California, Berkeley)

Structure-Aware Synthesis for Predictive Woven Fabric Appearance  
Shuang Zhao (Cornell University)

Point Sampling With General Noise Spectrum  
Yahan Zhou (University of Massachusetts Amherst)

Symmetry-Guided Texture Synthesis and Manipulation  
Vladimir Kim (Princeton University)

Resolution Enhancement by Vibrating Displays  
Floraine Berthouzoz (University of California, Berkeley)

Edge-Guided Resolution Enhancement in Projectors via Optical Pixel Sharing  
Behzad Sajadi (University of California, Irvine)

Tensor Displays: Compressive Light-Field Synthesis Using Multilayer Displays With Directional Backlighting  
Gordon Wetzstein (MIT Media Lab)

An Algebraic Model for Parameterized Shape Editing  
Martin Bokeloh (Stanford University)

Steady Affine Motions and Morphs  
Jarek Rossignac (Georgia Institute of Technology)

Image Melding: Combining Inconsistent Images Using Patch-Based Synthesis  
Soheil Darabi (University of New Mexico)

Panorama Weaving: Fast and Flexible Seam Processing  
Brian Summa (University of Utah and ViSUS Inc.)

Understanding and Improving the Realism of Image Composites  
Su Xue (Yale University)



Exposing Photo Manipulation With Inconsistent Reflections  
James F. O'Brien (University of California, Berkeley)

Position-Correcting Tools for 2D Digital Fabrication  
Alec Rivers (Massachusetts Institute of Technology)

Micro Perceptual Human Computation for Visual Tasks  
Yotam Gingold (Columbia University and Rutgers)

Energy-Based Self-Collision Culling for Arbitrary Mesh Deformations  
Changxi Zheng (Cornell University)

Physically Based Simulation of Rainbows  
Iman Sadeghi (University of California, San Diego)

A Framework for Content-Adaptive Photo Manipulation Macros  
Floraine Berthouzoz (University of California, Berkeley)

Image-Based Rendering for Scenes With Reflections  
Sudipta N. Sinha (Microsoft Research)

Motion-Driven Concatenative Synthesis of Cloth Sounds  
Steven S. An (Cornell University)

Precomputed Acceleration Noise for Improved Rigid-Body Sound  
Jeffrey N. Chadwick (Cornell University)

Interactive Sound Propagation Using Compact Acoustic Transfer Operators  
Lakulish Antani (University of North Carolina at Chapel Hill)

Updated Sparse Cholesky Factors for Corotational Elastodynamics  
Florian Hecht (University of California, Berkeley)

Global Parameterization by Incremental Flattening  
Ashish Myles (New York University)

Mass Splitting for Jitter-Free Parallel Rigid-Body Simulation  
Richard Tonge (NVIDIA Corporation)

Reflections on Simultaneous Impact  
Breannan Smith (Columbia University)

Discrete Bi-Laplacians and Biharmonic B-Splines  
Poweï Feng (Rice University)

Perceptual Models of Viewpoint Preference  
Adrian Secord (New York University)

Discrete Viscous Sheets  
Christopher Batty (Columbia University)