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SPACE-TIME STUDENT COMPETITION & EXHIBITION

Dena Elisabeth Eber, Bowling Green State University, USA LiQin Tan, Rutgers University, USA Scott Paul Dunham, Creative Energy Alliance, USA Jennifer Schmidt, School of the Museum of Fine Arts Boston, USA Jacob S. Pollak, The Detroit Creative Group, USA

SPACE-TIME TRAVELING STUDENT EXHIBITION

Jessica Maloney, Ashland University, USA

DESIGN DIRECTOR

Naotaka Minami, Pratt Institute, USA

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chair's statement

Through its Annual Report, the ACM SIGGRAPH Education Committee seeks to help the SIGGRAPH community become more familiar with its year-round education activities, and seeks to show how members of the community can participate. Here is what you will learn about in the following pages:

The Curricular & Instructional Resources subcommittee (C+IR) manages the Curriculum Knowledge Base (CKB), the Computer Graphics Educational Materials Source (CGEMS), the cgSource education resource collection, Visualization education, and the Digital Art Curriculum Framework project.

The Community Building & Support subcommittee manages the Education Committee Website, the Education Index, Games & Interactive Media, Primary/Secondary Education (P/SE), the Undergraduate Research Initiative, Global Outreach, and Conference Activities.

The SpaceTime subcommittee manages the SpaceTime Student Competition (print, interactive, and animation), the SpaceTime Student Exhibition, and the SpaceTime Student Traveling Exhibition.

As noted in this space last year, there is no need for me to enumerate the Committee's extensive activities in this introduction. Instead, I'm pleased to let the members of the ACM SIGGRAPH Education Committee* speak for themselves on the pages that follow.

Rick Barry ACM SIGGRAPH Education Committee Chair

*ACM SIGGRAPH is a professional organization run by volunteers. The volunteer members of the Education Committee are dedicated, selfless professionals and students who are a privilege to know and to work with. Their only reward is to serve our membership and our community. I am deeply grateful to each of them. Chairs: Frank Hanisch, Peter Weishar

Contact: hanisch@uni-tuebingen.de, pweishar@scad.edu http://education.siggraph.org/resources

How good can education in our field be, how good should it be and will it be if educational excellence is given the possibility to unfold? The Curricular and Instructional Resources (C+IR) working group's declared goal is to improve both the quality and dissemination of helpful educational resources in computer graphics, digital arts, and related fields, and further to acknowledge and network outstanding educators worldwide.

The subcommittee can offer these products as free service for educators in computer graphics and digital arts:

- A knowledge base defining and structuring the discipline
- A peer-reviewed material source (CGEMS) publishing the best of today's classroom materials, thereby qualifying and sharing educational excellence
- A community-rated collection (cgSource) lowering the barriers for sharing valuable teaching materials while still offering peer recognition
- Curricular efforts in Visualization Education, Digital Art, Game Education, Visual Arts, Primary/Secondary Education, and Computer Science

We are further constantly working towards integrating the committee's community building efforts into the broader curricular efforts.

At SIGGRAPH 2008, we're moderating a roundtable on Educational Resources. Here, teachers, curriculum designers, and other people involved in educational matters can meet other educators, learn about their approaches, and share their personal classroom experiences. Several self-made and third-party curricular and instructional resources will be presented; as well as the CGEMS awarded materials of 2008.

give and take

If you have developed quality educational material in the field, why not share it with the larger community? Submitting to cgSource is simple and barrier-free. CGEMS, on the other hand, is rigorously peer-reviewed by respected educators and experts in the field.

Contribute or download donated materials at http://cgems.inesc.pt or http://education.siggraph.org/resources/cgsource.

At the conference Roundtable on Educational Resources Thurs, Aug 14, 3:45 – 5:30 p.m. Room 506, LACC

Panelists: Gary Birch

Professor Emeritus and former Dean of Visual Communications Global Art Talent Resources Laguna College of Art and Design, Laguna Beach, CA Apple Distinguished Educator

Ken Huff

Savannah College of Art and Design, Savannah, GA

Jack Lew

Cal State University, Los Angeles, CA

Coordinators: Mike Bailey, Jenny Orr Contact: mjb@cs.oregonstate.edu

http://education.siggraph.org/resources/knowledge-base

Computer Graphics is evolving as a discipline characterized by the fusion of artistic and technical theories and skills. This project aims at defining this discipline by creating a curriculum knowledge base (CKB). The knowledge base is presented as a palette of subject areas and skills that forms the necessary educational framework for creating undergraduate curricula in computer graphics. By agreeing on a common set of curriculum paths and vocabulary, educators can more easily share course materials and students can more fluidly move between programs. It also facilitates the development of attributes that will create paths toward professional work, graduate studies, and lifelong learning in computer graphics. The CKB taxonomy may be found in CGEMS, the joint online educational resource of ACM SIGGRAPH and Eurographics [http://education.siggraph.org/resources/cgems].

At the SIGGRAPH 2007 Educators Program, the CKB Committee's work on the curriculum knowledge base was officially awarded an Honorable Mention for Outstanding Contribution in the Special Issue: Spreading the Computer Graphics Curriculum, CGEMS: Computer Graphics Educational Materials.

Over the past year, the CKB Committee used their taxonomy as a starting point in the creation of a new keyword list for categorizing and searching CGEMS and cgSource [http://education.siggraph.org/resources/cgems] via the Education Committee's Curricular and Instructional Resources (C+IR) [http://education.siggraph.org/resources]. This keyword list will be further refined through discussion and collaboration with C+IR during the 2008 SIGGRAPH meeting.

At the conference
Roundtable on Educational Resources
Thurs, Aug 14, 3:45 – 5:30 p.m.
Room 506, LACC
Education Committee Resources
Other CG and Digital Arts Resources
2008 CGEMS Awards



Education Committee Forum at SIGGRAPH 2007 (From left) Lew Hitchner, Susan Gold, Joe Geigel, Jenny Orr, Tony Ally (RIP), Tereza Flaxman

Coordinators: Frank Hanisch, Joaquim Jorge

Contact: hanisch@uni-tuebingen.de

http://education.siggraph.org/resources/cgems



Additional Contributor: Frederico Figueiredo

The Computer Graphics Educational Materials Source (CGEMS) is a peer-reviewed online repository publishing curricula, course modules and syllabi, lab notes, problem sets, teaching gems, and student work. It is an ongoing, joint effort of the ACM SIGGRAPH Education Committee and the Eurographics Education Board. CGEMS offers published peer recognition in computer graphics education, and makes available excellent, ready-to-use teaching materials worldwide, free of charge, and ensured by Creative Commons licensing. All material is documented with educational goals, methodology, and assessment, and undergoes critique by long-term educators, professionals, and artists. More than 60 reviewers from 13 countries are involved.

While in the first years nearly all materials were rejected, 6 of 11 were published in 2007, 6 of 8 in 2008. Submissions generally require few revisions. CGEMS helps to establish a common sense of what makes good educational work in the field, and whether it can really be shared and applied in other educational setups. With more publications at hand, we are now reworking the CGEMS website. Material previews and direct downloads are implemented, and the material details page is redesigned. We have included visual indicators for licenses and awards; awarded materials are supplemented with an Editor's Note. Reviewers are now acknowledged in public.

> call for materials

We are collecting educational material showcasing the best examples of teaching in Computer Graphics and Digital Arts. If you have developed valuable content in the field, publish it at CGEMS and shape your academic identity!

Deadline: February 1, 2009

Outstanding contributions will be exhibited at SIGGRAPH 2009. The winner will receive free conference access.

We consider material in the following categories:

- Curriculum: The body of knowledge of a specific curriculum with knowledge areas, units, and exemplary topics.
- Course Syllabus: A course description with a sequence of educational units, course requirements and student readings. New category in 2009!
- Complete Module: A self-contained, single-topic teaching unit, e.g. a book or course slides.
- Lab Notes: An annotated laboratory session with a list for materials, equipment, and procedures required to conduct the experiments.
- Problem Set: Student assignment with underlying rational and structure.
- Teaching Gem: An innovative bit of teaching material that highlights an approach to teaching a particular problem.

Authoring guidelines, templates, and examples are available at http://cgems.inesc.pt.



Title: X3D: Extensible 3D Graphics for Web Authors

Author: Don Brutzman

Affiliation: Naval Postgraduate School

Keywords: 2D and 3D Modeling, Interactive Techniques, Scene Graphs, Virtual Reality

Audience: Educators

Abstract: X3D is the ISO-standard scene-graph language for interactive 3D graphics on the Web. A new course is available for teaching the fundamentals of 3D graphics using Extensible 3D (X3D). Resources include a detailed textbook, an authoring tool, hundreds of example scenes, and detailed slidesets covering each chapter. The published book is commercially available, while all other course-module resources are provided online free under an open-source license. Numerous other commercial and open resources are available for X3D, which also serves as an interchange format. The supported course has been taught for many years, successfully introducing masters' students to the principles and techniques of 3D graphics without requiring programming experience. This course and module appears to be ready for undergraduate use. Expressing 3D within the domain of Extensible Markup Language (XML) for the Web is novel and has the potential to open up computer graphics to many new practitioners. This combined resource is intended broadly support computer graphics education and skills for web authors.

Editor's Note: Don Brutzman has provided a complete module for introducing beginning students to computing and graphics from a programmer's perspective, without sacrificing the sensitivity needed by artists and graphic designers. This is a comprehensive collection of materials that has received thorough testing in practice and presents a carefully constructed and well-argued covering document. It is worth mentioning that one of our reviewers teaches an introductory computer graphics course in just this way, using X3D, supported by X3D-Edit. He has testified to the value of this tool, and that the approach is well-liked by students. Try it yourself!

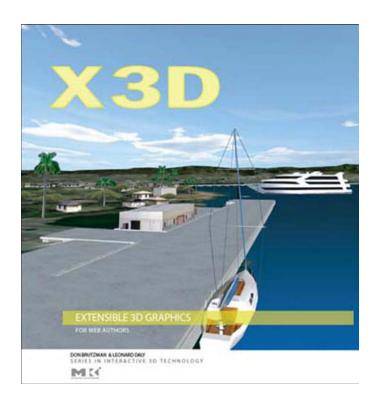
CGEMS Award Jurors:

Colleen Case
Past-Director for Education
ACM SIGGRAPH

Tony Longson
Cal State University, Los Angeles, CA

Jacki Morie University of Southern California Los Angeles, CA

Anne Spalter Brown University, Providence, RI & Anne Spalter Studios



Title: Parametric Polynomial Curves

Author: David Stahl

Affiliation: US Naval Academy

Keywords: 2D and 3D Modeling, Algorithm Development, Rendering

Audience: Introductory Undergraduate Computer Graphics

Abstract: Spline curves and surface patches have an innate mathematical beauty and broad practical application in the field of computer graphics. Yet the subject proves difficult to convey to beginning graphics students averse to math and theory in general. The difficulty is mitigated by having students complete an implementation of carefully prepared scaffold code. A particular code framework allows focusing student effort on understanding the algorithm and the theory rather than the visualization details. In this manner understanding is developed and reinforced by means of an exercise no more difficult than a short lab assignment.



Editor's Note: A well designed module on parametric curve fitting that makes the topic very accessible to students with varied mathematics backgrounds. It engages the students and lets them focus on the curve fitting techniques, not having to worry about the rest of what's needed to make the graphics work. Our reviewers agreed with many of the author's observations about students and their learning of curve approximation, and strongly recommend using the material here (and the approach) with your students.

Title: Realtime 3D Graphics Programming Using the Quake3 Engine

Author: Daniel Wagner, Bernhard Kainz, Dieter Schmalstieg

Affiliation: Graz University of Technology

Keywords: Graphics APIs, Rendering Audience: Advanced Computer Graphics

Abstract: We present a lab assignment that accompanies a complete module called "Realtime Graphics." The students' task is to get familiar with content creation and programming a (previously) commercial 3D engine. In a first task, students have to create 3D content, which is integrated into the Quake3 engine. In a second task, the students have to implement a simple animation and finally add an impressive 3D graphics effect to the Quake3 engine. The lecture has been taught four times from 2004 to 2007. We present the assignment and report on experiences that we have gained.



Editor's Note: This module enables students to easily integrate 3D special effects in the Quake3 engine and allowing their development without having to deal too much with the inner workings of the engine. Background material, resources, notes, and program code are provided in order to illustrate the tools and techniques necessary to produce a special effect and animation with various computational resources. Our reviewers agree with the authors when they say that the use of a 3D engine such as Quake 3 turned out to be highly motivating for students.



Coordinators: Frederico Figueiredo, Bridget Gaynor, Josephine Leong

http://education.siggraph.org/resources/cgsource

The cgSource is a simple and barrier-free community-based repository for curricula and educational resources in Computer Graphics (CG), Digital Arts, and related fields. Before being published online, all submitted materials are checked for basic acceptability criteria, carried out by one or more cgSource coordinators, which includes scope, licensing, affiliation, completeness, usability with free/available software, and specified technical requirements. Unless otherwise noted, all materials available in cgSource are licensed under Creative Commons (Attribution-Noncommercial-Share Alike 3.0)

[http://creativecommons.org/licenses/by-nc-sa/3.0].

Currently, submissions are sent via an email message to the cgSource coordinators at cgsource@siggraph.org. Authors of accepted materials are asked to read and sign the cgSource License Agreement. Materials are then made available and put in the cgSource repository (i.e. contents are frozen and uploaded). Similar to CGEMS, materials are planned to be structured according to the current CG taxonomy defined by the Education Committee's Curriculum Knowledge Base (CKB). Based on each submission, keywords will be assigned to all content (existing and new). This work is ongoing and is expected to be finished before the end of this year.

Serving as a community-based repository, cgSource seeks to provide the CG community with a mechanism for commenting and rating published materials. Unlike CGEMS, which requires formal submission and peer review requirements, it is up to the online community to judge the quality of the materials published in cgSource. For this reason, in addition the work title, author(s) name/affiliation, license agreement, and all associated material, authors are encouraged to provide: short description; long description (a more detailed description of the content and the files included; plus the requirements for viewing); and keywords.

Since SIGGRAPH 2007, the cgSource team has carefully reviewed and made available the acceptability criteria for cgSource. In addition, they defined the license agreement according to Creative Commons. In the meantime, the procedures were tested and successfully applied to six new submissions. All were accepted for publication and are posted on our current website at http://education.siggraph.org/resources/cgsource.



During this year, the cgSource team plans to further develop synergies with the CGEMS community to increase visibility of the contents and get new submissions. Similar to last year, solicitation is planned during SIGGRAPH 2008. Depending on the number of submissions to come, several new features are planned to further support the CG online community: online submission / review system, feature most popular material of the month, mechanism to invite / recommend submissions, among others.

Coordinator: Gitta Domik
Contact: domik@siggraph.org
http://www.uni-paderborn.de/cs/vis

A rising tendency in visualization is the collaboration between different disciplines. In a recent panel, Alan Chalmers, Gitta Domik (chair), Dieter Fellner and Holly Rushmeier discussed "What Can We Gain from Transdisciplinary Visualization Courses?" with other participants of Eurographics 2008 in Crete, Greece. Speakers voiced the following possible gains, expected problems, and practical solutions.

Examples of gains include students who deal with real world problems early in their education (given that problem sets are accurate), who face new questions (e.g. "How can I trust your pictures of my data?"), and who deepen their interdisciplinary knowledge and social competencies.

Examples of problems include interdisciplinary knowledge that might reduce core visualization knowledge, establishing common ground between disciplines might consume time, ground rules must be established to avoid unrealistic expectations between disciplines, lab time might increase tremendously to teach interdisciplinary students programming, and lastly, bureaucracy might hinder such collaborations.

In practical terms, collaborative visualization courses may be taught along a continuum of collaboration levels:

- Multidisciplinary courses deal with different disciplines in a separate mode: students of different disciplines work out of their own knowledge; typically one educator has responsibility for a course;
- Interdisciplinary courses have students collaborate on assignments and projects; guest speakers of different disciplines may appear;
- Transdisciplinary courses typically have educators of different disciplines share responsibility for a course; students work in interdisciplinary groups and take an active part together with educators to analyze and synthesize different disciplinary views.

The need for more discussions and sharing of experiences on interdisciplinary visualization courses was requested. Come to the BOF at SIGGRAPH 2008, Monday, 11 August, 2-3:30, Room 507, to participate! Look for announcements of more BOFs, Education programs and discussions in the near future at www.uni-paderborn.de/cs/vis.. Also, all speakers' slides from the panel can be downloaded there: Go to "Visualization Courses WorldWide" and check out "Collaborative and interdisciplinary courses." The website was recently updated and now also includes links to Design-Oriented Visualization courses.









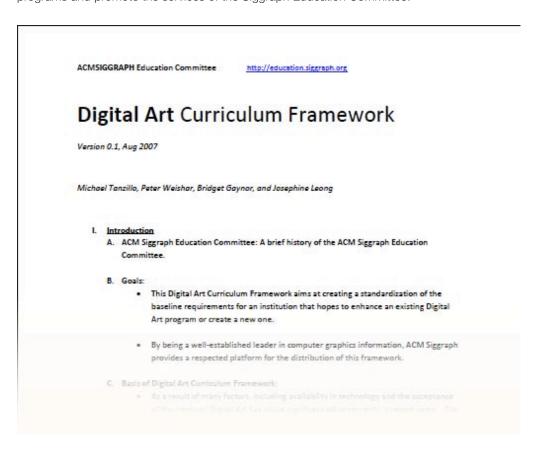
Visualization panel at Eurographics 2008 (From left) Gitta Domik, Alan Chalmers, Holly Rushmeier, Deiter Fellner

Authors: Peter Weishar, Michael Tanzillo, Bridget Gaynor, Josephine Leong http://education.siggraph.org/resources/artscurric/framework/view

The Digital Art Curriculum Framework is designed to assist educators in the creation of a Fine Art program with emphasis on digital assets, rather than traditional mediums. It incorporates research into some of the more well-established Digital Art programs in both North America, including Cornell University, Texas A&M, and The Ohio State University, and the world at large. Based on the research, this framework outlines the structure necessary for the creation of a Digital Art degree program.

This framework also serves as a guide for students creating individualized courses of study at institutions without Digital Art programs. It will also strive to create a clear definition of what distinguishes "Digital Art" from "Digital Arts." In an academic environment, "Digital Arts" can refer to a broader range of topics including graphic design, visualization, architecture, and photography. "Digital Art," on the other hand, will be defined as a subcategory within the broader "Digital Arts."

In 2007, this project was devoted to researching and summarizing existing Digital Art programs. For 2008, the Digital Art Curriculum Framework will look to develop a standard curriculum based upon this previous research. In the future, this project will be distributed to members and organizations within the academic community so it can aid in the development of Digital Art programs and promote the services of the Siggraph Education Committee.



Coordinator: Wobbe F. Koning Contact: wobbe@siggraph.org

Though regularly maintained, the website of the education committee did not undergo any major changes over the last year. However, we are proud to have added "The History of Computer Graphics and Digital Art Project" to our non-peer reviewed resources at cgSource. This project is headed by Anna Ursyn of the University of Northern Colorado.

A lot is happening "behind the scenes" right now. We will soon upgrade the site to the latest version of Plone² — the open source content management system we use and that powers most of the ACM SIGGRAPH websites. The new authentication system will enable us open up the site for community commenting and review.



There are other activities under way that will enhance the website. A test version of the new Education Index³ came online just in time for last year's conference, and specifications for a more useful and user friendly implementation are currently being worked out.

To make it easier for users to locate relevant content on the website, a sub-committee has been formed to create a practical subset of the Curriculum Knowledge Base, to use as keywords for all the content on the site.

With exciting developments under way, I believe the improved web presence of the education committee will make our website an increasingly important resource for educators in the broad field of computer graphics.

Links:

- 1. http://education.siggraph.org/resources/cgsource/instructional-materials/history
- 2. http://plone.org
- 3. http://education.siggraph.org/resources/directory

Coordinator: James Martinez http://www.digital-evolutions.org

In continued support of our mission we are posting a new web site. Digital Evolutions is an accelerated exploratory technology program, introducing students to graphic design, multimedia, programming, and video production, with a heavy focus on 3D visualization & animation.

Links on the web at http://www.digital-evolutions.org/de.html



sub-committee growing

Dan Cornell is the Teacher who runs Digital Evolutions. He is a 3D teacher at Smoky Hills High School in Aurora, Colorado. He has taught 3D for the last 6 years to both middle school and high school students. His students have won numerous awards. Please take a look at his website (above). They are doing some amazing things. Dan has also agreed to be a part of the K-12 Primary/Secondary Sub-Committee. His knowledge will be a great resource.

Throughout the year several K-12 teachers have contacted the Sub-Committee about the Conference. Many are expecting to attend SIGGRAPH LA 08, and we are looking forward to creating a larger community this year. This will be accomplished with a stronger effort towards recruiting at the Education Booth.

birds of a feather submissions

The committee will be sponsoring three Birds of a Feather sessions this year. Our main objective is to provide the K-12 teacher with the opportunity to meet with others in their field. Each BOF will end with a K-12 Primary/Secondary Sub-Committee membership drive.

birds of a feather sessions

1. Bringing Visualization into the Primary and Secondary Classroom

Are you hoping to add technology to your primary or secondary school classroom, or are you responsible for helping others do this? We will share tips, links, software, and ideas. We will work to refine documents for publication on the Education Committee P/SE web page.

[http://education. siggraph.org/community/k-12]

2. Where Do You Send Your High School Graduate?

Do you have students ready to apply to a CG or digital arts program now or in the future? What is the best choice for your student and his/her future? We will seek to help teachers begin to make sense of it all. We'll begin with the new Education Index.

[http://education.siggraph.org/resources/directory]

3. SIGGRAPH K-12 Primary/Secondary Membership Drive

Come to this session and meet other teachers interested in K-12 Primary/Secondary Education. This is a great way to be a part of the conference. Bring your ideas and find others who will help you realize them.

> goals for 2008 - 2009

cgems submissions continue

The Sub-Committee will continue to cultivate teachers who are willing to make submissions to CGEMS and CG Source. We are looking to complete the first submission this year.

proposal for K-12 animation contest to be submitted to education committee Last year the committee began the process of increasing the K-12 submissions to the Space Time competition. The K-12 Sub-Committee will have a proposal ready for the Education Committee to review in L.A.

The competition will have several levels for entries. The upper level will be centered on Demo Reels created by students for acceptance to academic institutions or industry. Other entry categories will recognize creativity and modeling in all grade levels.

Coordinator: William J. Joel, Western

Approximately four years ago, Dr. William Joel began a series of annual Birds-of-a-Feather sessions concerning undergraduate computer graphics research. Birds-of-a-Feather (BOF) sessions are informal gatherings that take place during the SIGGRAPH conference. Two years ago, the Education Committee decided to create an initiative in this area, coordinated by Dr. Joel. Last year's BOF focussed on what the Education Committee could do to both foster and support student research projects. The primary outcome of that session was a recommendation that online tools should be provided to facilitate the development of student reasearch projects. These tools would allow faculty to share expertise and ideas concerning student research, and perhaps facilitiate inter-institutional endeavors. Dr. Joel will be working with SysMgr and Education Webmaster Wobbe Koning to develop these tools. During this year's annual conference, Dr. Joel will again be hosting a BOF to create a cohort of faculty who would like their students to work together on projects.



Global Outreach Coordinator: Rejane Spitz

Contact: rejane@puc-rio.br

One of the major objectives of the ACM SIGGRAPH Education Committee is to help establish a worldwide network of computer graphics educators. The Education Committee began its international activities in 1991, by appointing an International Representative in South America. Our worldwide connections and activities have substantially grown since then. Today our Education Committee is truly multinational and cross-cultural, with volunteer members from North and South America, Asia and Europe, thus creating a much wider educational network.

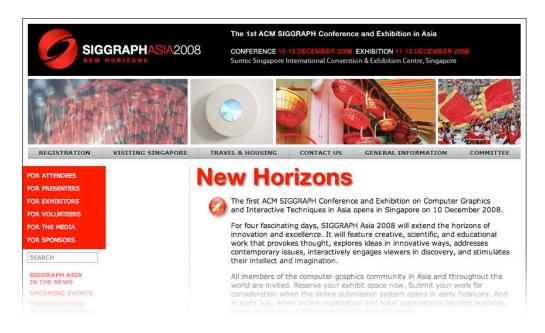
Our current International Representatives are:

- Werner Hansmann (2007) and Gitta Domik (2008) (Germany) European Representatives
- Rejane Spitz (Brazil) South American Representative
- Zhigeng Pan, Weihua Gao and Liuyi Wang (China) Asian Representatives

Our ACM SIGGRAPH Education Committee members have active roles in the planning and organization of education-related CG events in several countries, which offers an excellent opportunity for us to exchange information and promote our ACM SIGGRAPH educational activities worldwide.

For many years we have been actively involved in the organization and promotion of conferences such as Eurographics (held in the Czech Republic in 2007 and to be held in Greece in 2008), and SIGRADI (the Ibero-American Association for Computer Graphics), held in Mexico in 2007, and to be held in Cuba in 2008. This year we are also actively involved in the promotion of SIGGRAPH Asia 2008 - to be held in December 2008 in Singapore – which will present a very promising and innovative Educators Programme, chaired by Mark Chavez.

In this report we list several international educational activities, events and conferences in CG and related areas in which our Committee members and International Representatives are involved, which took or will take place in Europe, Asia and Latin America in 2007-2008.



European Representatives: Gitta Domik, Werner Hansmann – Germany

At the International conference EUROGRAPHICS 2007, which took place September 3 - 7, 2007 in Prague, Czech Republic, an education track, chaired by Petr Felkel (CZ) and Isabel Navazo (ES) featured 3 sessions on CG education: Teaching Computer Graphics, Teaching with Computer Graphics and Panel Discussion. At the first 2 sessions, very good papers were presented to a highly interested audience. At the panel session, with Steve Cunningham (USA) as moderator, 4 distinguished panelists (Jean-Jacques Bourdin (France), Cecilia Sik Lanyi (Hungary), Marta Fairen (ES), Werner Hansmann (Germany) presented recommendations of the CG Education Workshop (CGEW'06), which was held in September 2006 in Vienna, Austria. The presentation proceeded into a spirited discussion with the audience.

At the International conference EUROGRAPHICS 2008, which took place April 14 - 18, 2008 near Heraklion, Greece, the education track was chaired by Steve Cunningham (USA) and Lars Kjelldahl (S). It also featured 3 sessions on CG education: Games for Education, Teaching and Panel Discussion. At the panel session, chaired by Gitta Domik (Germany), the panelists Alan Chalmers (UK), Dieter Fellner (Austria), and Holly Rushmeier (USA) captured the audience discussing the question: "What Can We Gain from Transdisciplinary Visualization Courses?"

The organization of future EG/SIGGRAPH workshops and the common participation of EUROGRAPHICS and ACM SIGGRAPH in the Educators Program at SIGGRAPH Asia 2008 have been discussed with Rick Barry (ACM SIGGRAPH Education Committee Chair). Mark Chavez (Chair of the SIGGRAPH Asia Educators Program) has suggested to organize a plenary opening session with a representation of both ACM SIGGRAPH Education Committee and EUROGRAPHICS Education Board.

The ACM SIGGRAPH Education Committee is pleased to continue its support of Computer Graphics Education workshops. The next workshop is planned to be held at EUROGRAPHICS 2009 in Munich (Germany) in April 2009. Some possible topics have been proposed. Invitations will be distributed soon.

At a meeting of the EUROGRAPHICS Education Board in April 2008, it was agreed that a special Book Review Section on textbooks dealing with CG will be included in the Journal "Computer Graphics Forum." The ACM SIGGRAPH Education Committee and the EUROGRAPHICS Education Board have agreed to renew support of the CGEMS project for another year, based on a 75% / 25% support arrangement.

For EUROGRAPHICS 2009, Gitta Domik will be co-chairing (together with Riccardo Scateni, Italy) the Education Program (Munich, March 30-April 3, 2009). The conference will also have an education workshop (Eurographics/Siggraph) bundled in that will be co-chaired by Steve Cunningham and Colleen Case. Education Workshop and Education Program Chairs will work closely together to define the Education program.

≫asia

Asian Representatives: Zhigeng Pan, Liuyi Wang, Weihua Gao - China

- October, 16-18, 2007, ASIAGRAPH, Tokyo
 This is an event for Exhibition and show of CG product, emerging technologies, digital art, et al. Several hundreds of people attend the event. Invited speakers are from Japan, Korea, and China.
- June 18-20, Edutainment'2007, Hong Kong
 This is an international conference on E-learning and
 games, sponsored by VR Committee, China Society of
 Image and Graphics. Approximately 150 people have
 attended that conference.



- June 25-27, Edutainment'2008, Nanjing, China
 This is the third international conference on E-learning and games, sponsored by VR
 Committee, China Society of Image and Graphics. There will be approximately 150 people
 attending that conference.
- October, 2007, CICDAF 2007, Beijing, China
 The 4th China International Animation and Digital Arts Festival (CICDAF 2007).
- September 28-October 1, 2008, CICDAF 2008, Changzhou, China
 The 5th China International Animation and Digital Arts Festival (CICDAF 2008). More
 information on this event can be found at http://www.cicdaf.com/2008en.
- •December, 10-13, 2008, SIGGRAPH Asia 2008, Singapore
 This can be seen as the winter conference of SIGGRAPH, as the summer conference is
 usually in USA. This event will attract more people in Asia area to attend SIGGRAPH, and
 push SIGGRAPH around the world. SIGGRAPH Education Committee has active roles in the
 promotion, and will also have some kind of education events planned.
- July 18-20, 2008, 2nd. Asian Youth Animation & Comics Contest, AYACC, China More information on this event can be found at http://www.ayacc.org.

>south america

South American Representative: Rejane Spitz - Brazil

Computer Graphics conferences (as well as conferences on Electronic Art, Games, Entertainment and other CG related subjects) are excellent venues for connecting to educators and encouraging them to join and participate in ACM SIGGRAPH events, thus expanding our educational network in South America. In 2007-2008 we have been involved in establishing links and promoting ACM SIGGRAPH Education Committee initiatives at the following conferences, held (or to be held) in South America:

 SIGRADI Conferences (organized by the Ibero-American Association for Computer Graphics), Mexico (2007) and to be held in Cuba in 2008. International symposiums hosted by educational institutions located in different Ibero-American countries. Our Education Committee South American Representative, Rejane Spitz, has been actively involved in this Organization, as a member of the Executive Committee of SIGRADI 2000 (Rio de Janeiro, Brazil) and as a member of the Scientific Committee of several SIGRADI symposiums, such as 2001 (Chile), 2002 (Venezuela), 2003 (Argentina), 2004 (Brazil), 2005 (Peru), 2006 (Chile), and 2007 (Mexico). Considering their wide spectrum of presenters and attendees, SIGRADI symposiums offer an excellent opportunity for the ACM SIGGRAPH Education Committee to get in touch with CG educators from Latin American countries.



- 8th P&D Design 2008 (Congresso Brasileiro de Pesquisa e Desenvolvimento em Design), October 2008, São Paulo (Brazil). This is the major Design conference in Latin America. The ACM SIGGRAPH Education Committeee's South American Representative is a member of the P&D'2008 Scientific Committee, as well as a speaker at the Papers Session.
- Anima Mundi International Animation Festival 2008, held annualy in Rio de Janeiro and Sao Paulo, Brazil. This year we have helped to establish a link between Marcos Magalhães (member of the Organizing Committee of ANIMA MUNDI and Professor at PUC-Rio University) and Patricia Beckman (Chair of FJORG /SIGGRAPH 2007 and 2008), which will hopefully increase the participation of South American animators at SIGGRAPH conferences.
- SBDI Conference 2007 (organized by the Sociedade Brasileira de Design de Informação),
 October 2007, Curitiba (Brazil) a biennial international conference which congregates designers from different parts of the world, mostly from South American countries.
- SBGames 2008 (Brazilian Symposia on Games and Digital Entertainment) to be held in Minas Gerais, Brazil in 2008. In 2009 the conference will be hosted by PUC-Rio, Brazil. Our Education Committee South American Representative has been invited to take part in the SBGames 2009 Organizing Committee, and would like to establish a collaboration between SBGames and ACM SIGGRAPH.
- Encuentros de Intercambio Interdisciplinario Brasil-Argentina (Interdiciplinary Exchange Meetings Brazil-Argentina) (Universidad Buenos Aires, Argentina and PUC-Rio, Brazil) - our first Meeting was held at Universidad Buenos Aires, Argentina, in July 2007, and we are planning to host a 2nd Meeting at PUC-Rio, Brazil, in 2008-2009.

We have also established an important partnership with the international association LEONARDO/ISAST (International Society for the Arts, Science and Technology), whose projects, publications and activities congregate CG professionals from all over the world. Being an ACM SIGGRAPH Education Committee's International Representative, and a member of the International Board of LEONARDO/ISAST, Rejane Spitz has been involved in several collaborations between LEONARDO/ISAST and SIGGRAPH. This year, Roger Malina (Chief Editor of LEONARDO Journal) has proposed to Rick Barry (Director for Education) to publish a series of education-related texts on a regular basis. One of LEONARDO's major initiatives this year is the LEONARDO Education Forum, congregating educators from all over the world.

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9:00 a.m. - 5:00 p.m. Education Booth & SpaceTime Student Exhibition

ACM SIGGRAPH Village, Los Angeles Convention Center

10:30 a.m. - 12:15 p.m. Educators Plenary Café

Room 411, Los Angeles Convention Center

2:00 a.m. - 3:30 p.m. Birds of a Feather

"Playing Nice: How to Teach Interdisciplinary Collaboration"

Room 507, Los Angeles Convention Center

august 12

9:00 a.m. - 5:00 p.m. Education Booth & SpaceTime Student Exhibition

ACM SIGGRAPH Village, Los Angeles Convention Center

10:00 a.m. - 11:00 a.m. Birds of a Feather

"Bringing Visualization Into the Primary and Secondary Classroom"

Room 511A, Los Angeles Convention Center

august 13

9:00 a.m. - 10:00 a.m. Birds of a Feather

"Where Do You Send Your High School Graduate?"

Room 501A, Los Angeles Convention Center

9:00 a.m. - 10:30 a.m. Birds of a Feather

"Undergraduate Computer Graphics Research Alliance"

Room 507, Los Angeles Convention Center

9:00 a.m. - 5:00 p.m. Education Booth & SpaceTime Student Exhibition

ACM SIGGRAPH Village, Los Angeles Convention Center

3:45 p.m. - 5:30 p.m. SpaceTime Student Awards

Room 411, Los Angeles Convention Center

5:30 p.m. SpaceTime Student Gallery in Second Life

ACM SIGGRAPH Village, Los Angeles Convention Center

august 14

9:00 a.m. - 5:00 p.m. Education Booth & SpaceTime Student Exhibition

ACM SIGGRAPH Village, Los Angeles Convention Center

10:00 a.m. - 11:00 a.m. SIGGRAPH K-12 Primary/Secondary Membership Drive

Room 511A, Los Angeles Convention Center

3:45 p.m. - 5:30 p.m. Roundtable on Educational Resources

Room 506, Los Angeles Convention Center

Curator: Jessica Maloney

Contact: spacetravel@siggraph.org

The 2007-2008 SpaceTime Traveling Student Exhibition was comprised of the traveling portion of the 2007 SpaceTime Student Exhibition* displayed at the SIGGRAPH 2007 conference in San Diego. The show consisted of 40 poster designs and fine art prints, 8 interactive works, and an animation DVD reel. The show traveled to Ohio, Montana, Florida, New York, Kansas, and Colorado. Each venue displayed the work for one month before shipping it to the next locale. Photo documentation was requested from each venue, and although not all sent images, we do have photos from the New York exhibition which took place at the Rochester Institute of Technology in January.



In the coming year we hope to increase the number of schools, chapters, and others who host the show. We urge those who host the show to document it so we can continue to share it with the larger community. This traveling exhibition contains talented student work from around the world and is truly an inspiration. We hope you will encourage your students to submit their best work, and that you will consider becoming a host for upcoming 2008-2009 show schedule.

*For information about the SpaceTime Student Competition & Exhibition, please visit http://education.siggraph.org/students/students/competitions. The SpaceTime Catalog appears on the following pages of this annual report.

Dr. Tony Alley was laid to rest in January 2008. Tony was a key member of the ACM SIGGRAPH Education Committee, and was was instrumental in the development of the Curriculum Knowledge Base project.

Tony's family has requested in lieu of flowers that gifts may be made in Tony's honor for the "Dr. Tony Alley Computer Design and New Media Library Collection" at the Beam Library at Oklahoma Christian University by either purchasing a book from Tony's Amazon.com wish list at www.oc.edu/tonysbooks, or by making a gift to the library for that purpose. The university has created a blog in Tony's memory.

Visit http://education.siggraph.org/committee/in-memoriam-dr-tony-alley for more information about donating to the collection in Tony's honor.

education committee offers memorial gifts

The ACM SIGGRAPH Education Committee has made a cash gift to the "Dr. Tony Alley Computer Design and New Media Library Collection" at Oklahoma Christian University. The following arrangement was established with the Oklahoma Christian University:

memorial garden

The Education Committee is pleased to target a portion of its gift to a landscaped area near the "Dr. Tony Alley Computer Design and New Media Library Collection" at the Oklahoma Christian University. Since it was Tony's stated wish that computer graphics and related books be donated in his honor, a maximum of 30% of the gift is to be targeted to the landscaped area.

memorial plaque

Accompanying this gift was a memorial plaque to be placed in or near the Collection.



ACM SIGGRAPH EDUCATION COMMITTEE CHAIR

Rick Barry, Pratt Institute, USA

FDUCATION SYSADMIN

Wobbe F. Koning, Montclair State University, USA

C+IR CO-CHAIRS

Frank Hanisch, WSI/GRIS University of Tübingen, DE Peter Weishar, Savannah College of Art and Design, USA

CGEMS

Joaquim A. Jorge, INESC-ID Lisboa, PT Frank Hanisch, WSI/GRIS University of Tuebingen, DE

CGSOURCE

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CURRICULUM KNOWLEDGE BASE COORDINATORS

Mike Bailey, Oregon State University, USA Jenny Orr, Willamette University, USA Cary Laxer, Rose-Hulman Institute of Technology, USA

CURRICULUM KNOWLEDGE BASE TEAM MEMBERS

Gitta Domik, University of Paderborn, DE Lew Hitchner, Cal Poly State University, USA Tereza Flaxman, Harvard University Extension School, USA Joe Geigel, Rochester Institute of Technology, USA Susan Gold, IGDA, USA Jenny Orr, Willamette University, USA Ayumi Miyai, Computer Graphic Arts Society, Japan Rejane Spitz, PUC-Rio, Brazil

DIGITAL ART CURRICULUM FRAMEWORK

Peter Weishar, Savannah College of Art and Design, USA Michael Tanzillo, Savannah College of Art and Design, USA Bridget Gaynor, Savannah College of Art and Design, USA Josephine Leong, Savannah College of Art and Design, USA

VISUALIZATION EDUCATION

Gitta Domik, University of Paderborn, DE

EDUCATION INDEX

Tereza Flaxman, Harvard University Extension School, USA Wobbe F. Koning, Montclair State University, USA

GAMES AND INTERACTIVE MEDIA

Susan Gold, *IGDA, USA* Jacquelyn Ford Morie, *USC-CCT, USA*

PRIMARY/SECONDARY EDUCATION

James Martinez, Wye River Upper School, USA

HNDERGRADITATE RESEARCH INITIATIVE

William Joel, Western Connecticut State University, USA

GLOBAL OUTREACH

Rejane Spitz, *PUC-Rio, Brazil*Gitta Domik, *University of Paderborn, DE*Zhigeng Pan, *Zheijiang University, China*Weihua Gao, *Communications University of China, China*Liuyi Wang, *Organizing Committee of Asian Animation & Comics Contest, China*

CONFERENCE ACTIVITIES

Barb Helfer, Leapfrog, Inc., USA

SPACE-TIME STUDENT COMPETITION & EXHIBITION

Dena Elisabeth Eber, Bowling Green State University, USA LiQin Tan, Rutgers University, USA Scott Paul Dunham, Creative Energy Alliance, USA Jennifer Schmidt, School of the Museum of Fine Arts Boston, USA Jacob S. Pollak, The Detroit Creative Group, USA

SPACE-TIME TRAVELING STUDENT EXHIBITION

Jessica Maloney, Ashland University, USA

DESIGN DIRECTOR

Naotaka Minami, Pratt Institute, USA

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