



ACM SIGGRAPH COMMITTEE REPORT

Committee: Education

Committee Chair: Marc J. Barr

International Activities Report (2012-2013)

by **Rejane Spitz** (Brazil)
Global Outreach Coordinator

Introduction

One of the major objectives of the ACM SIGGRAPH Education Committee is to help establish a worldwide network of computer graphics educators.

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

Our current International Representatives are:

- **Gitta Domik** (*Germany*) – **European Representative**
- **Rejane Spitz** (*Brazil*) - **South American Representative**
- **Zhigeng Pan** (*China*) – **Asian Representative**

In this report we present several international educational activities, events and conferences in Computer Graphics and related areas in which our Committee members and International Representatives have been and/or are actively involved in 2012-2013, aiming at showing the scope and diversity of our international network.

Report from Europe
by **Gitta Domik (Germany)**

Within the Education Committee I am responsible for education activities, developing resources and providing information in and on computer-generated visualization. I try to provide information and materials through my website and through my publications.

The following education activities were accomplished in 2012-2013:

The ACM SIGGRAPH Education Committee Website <http://www.uni-paderborn.de/cs/vis> has been updated for new activities. This is the website that is linked to from the SIGGRAPH Education committee website <http://education.siggraph.org/resources>.

Another source of information for visualization and graphics educators is the new Education Department at IEEE Computer Graphics and Applications (Editors: Gitta Domik and G. Scott Owen). Between September 2012 and July 2013 the following articles were published through this department:

How Visualization Courses have changed over the past 10 years, by G. Scott Owen, Gitta Domik, David S. Ebert, Jörn Kohlhammer, Holly Rushmeier, Beatriz Sousa Santos, Daniel Weiskopf, IEEE Computer Graphics and Applications, Vol. 33, No. 4, July/August, 2013

Building Virtual Worlds Carrying on the Legacy of Randy Pausch's "Head Fake", by Jesse Schell and Chris Klug, Vol. 33, No. 3, pp. 12-15, May/June, 2013

Information Visualization Courses for Students with a Computer Science Background, by Andreas Kerren, Vol. 33, No. 2, pp. 12-15, March/April, 2013

Helping High Schoolers Move the (Virtual) World, by Gitta Domik, Stephan Arens, Peter Stilow and Hauke Friedrich, Vol. 32, No. 1, pp. 70-74, January/February, 2013

Introducing Google Chart Tools and Google Maps API in Data Visualization Courses, by Ying Zhu, Vol. 32, No. 6, pp. 6-9, November/December, 2012

Teaching 3D Computer Animation to Illustrators: The Instructor as Translator and Technical Director, by Wobbe F. Koning, Vol. 32, No. 5, pp. 81-83, September/October, 2012

Eurographics 2013 featured the Education Track on May 9, 2013, in Girona, Spain, with four papers and one discussion:

Project-Based Learning of Advanced Computer Graphics and Interaction *Romero, M.*

Student Project – Racing Launcher Game *Anderson, E.F.*

Introductory graphics for very diverse audiences *Pelechano, N. & Fairen M.*

Scene graph creation and management for Undergraduates *Shesh, A. & Jones M.*

Moderated discussion: "The progress of computer graphics programs in meeting the Bologna requirements" *Moderator: Jean-Jacques Bourdin*

Chairs of the Education Track were Eva Cerezo, Jean-Jacques Bourdin and Steve Cunningham.

The new chair of the Eurographics Education Committee starting 2013 is Beatriz Sousa Santos.

Report from South America
by Rejane Spitz (Brazil)

In parallel with my SIGGRAPH activities, I have been conducting several other volunteer activities throughout this year, as a member of the Executive, Advisory, Scientific and/or Organizing Committees at several Conferences in South America. Said volunteer activities help me promote ACM SIGGRAPH educational activities and events through different communities, by building a major international network linking the areas of Art, Design, Architecture, Computer Graphics and Science.

I have also been involved in several international teaching activities (at the Doctoral level), as a result of a partnership established between PUC-Rio University (Brazil) and Pontificia Universidad Catolica de Valparaiso (Chile), in 2011, and between PUC-Rio University (Brazil) and Universidad Iberoamericana (Mexico), in 2012. Through these activities, I have had the opportunity to disseminate SIGGRAPH and its educational activities to numerous professionals in Latin America, including my Chilean and Mexican PhD students in their respective fields of Art, Design and Architecture. Prior to these conversations, the majority of them were not aware of SIGGRAPH, but are now interested in becoming participants in the association and its related conferences.

In 2011-2012 I have been involved in establishing links and promoting our ACM SIGGRAPH Education Committee initiatives at the following conferences and events, held in South America, as well as in North America:

a) In Brazil:

SIGRADI 2012 - November 13- 16, 2012

The XVI SIGRaDi conference took place in Fortaleza, Brazil. It was organized by the Universidade Federal do Ceara and by Fundacao Edson Queiroz Universidade de Fortaleza. Most of SIGRADI's attendees are educators, and during my talks I had the opportunity to encourage attendees to join and attend SIGGRAPH conferences and SIGGRAPH educational related events.

VI RUN - International Academic Network for Digital Creation (VI Encontro da RUN - Réseau Universitaire International de Création Numérique), Universidade Federal Fluminense, Niterói, Rio de Janeiro, 7-13 July 2013.

Professors and students from all continents which are part of the RUN Network once a year get together for a week for a series of talks, workshops and activities. This year the meeting will be held in Niteroi, Rio de Janeiro, and I was invited to give a talk in the Seminar, and to participate in other activities - with my group of postgraduate students (15 MA and PhD students). During my talk, I will have the opportunity to mention my role as SIGGRAPH Global Outreach Coordinator, show samples of works exhibited and presented at SIGGRAPH, and to encourage attendees to join and attend SIGGRAPH conferences and educational related events.

b) In Mexico:

International Seminar for Research in Design, Diversity and Integration (Seminário Internacional de Investigación en Diseño, Diversidad y Integración) – Universidad Iberoamericana, Mexico – October 26 –November 1, 2012

This event was part of the major event *XXIII Encuentro Nacional de Escuelas de Diseño Gráfico* (XXIII Graphic Design Schools National Meeting), hosted by the Universidad Iberoamericana, in Ciudad de Mexico, Mexico, which was attended by hundreds of Graphic Design educators from different regions of Mexico. The aim of the **International Seminar for Research in Design, Diversity** was to present the work and researches conducted at the Department of Art & Design at PUC-Rio by a group of leading professors. In my talk, I mentioned my role as SIGGRAPH Global Outreach Coordinator, presented samples of works exhibited at SIGGRAPH Conferences, and

encouraged participants to get involved with the Education Committee international activities and to attend SIGGRAPH conferences.

c) In the United States:

Birds of a Feather Session "Art, Science, and Interactivity: creating engaging experiences in education – Rejane Spitz/ACM SIGGRAPH Education Committee - 22 July 2013

The "Art with Science" project ("*ARTE COM CIÊNCIA*"), organized by the NGO IPTI (*Institute for Research in Technology and Innovation*), aims at promoting art+science education in high schools located in very poor communities in the Northeast of Brazil. Two projects developed by high school students from poor communities in the State of Sergipe - using very limited resources and technical skills - were transformed by The Department of Art & Design at PUC-Rio University into interactive installations which are currently being exhibited at the *Museu da Gente Sergipana*, a museum of Art & Technology in the Northeast of Brazil, focusing on interactivity and science education. The goals, development and results of the "Art with Science" project will be presented at the SIGGRAPH 2013 Birds of a Feather Session "Art, Science, and Interactivity: creating engaging experiences in education", submitted by Rejane Spitz (Global Outreach Coordinator) in partnership with the ACM SIGGRAPH Education Committee, which will be held on Monday 22 July 2013, from 10 – 11 am. In this session, we will also encourage the use of interactive approaches and techniques in education, by discussing ways to promote creative and technical collaboration for the development of engaging educational projects.