

SIGGRAPH 2013 for Educators

Welcome to the 40th International Conference and Exhibition on Computer Graphics and Interactive Techniques.

Welcome to **SIGGRAPH**.

SIGGRAPH 2013 features five days of talks, technical sessions, production case studies, hands-on exhibits, networking opportunities, and affinity groups for educators.

On **Sunday, 21 July**, a pair of co-located workshops held at the Hilton Anaheim is offered specifically for educators: *Processing as Intro to CS* and *Drawing Machines*. Also on Sunday, SIGGRAPH 2013 kicks off in Ballroom E of the Convention Center with the popular *Introduction to Computer Graphics* course taught by Andrew Glassner of The Imaginary Institute, for educators and others who want a complete, concise summary of this dynamic field.

On **Sunday, 21 July** and **Monday, 22 July**, more than 15 Birds of a Feather sessions focus on a variety of education-related topics, including 3D printing technology, integration of art and science, worlds of art and music, open source in graphics education, and more. There are two sessions that will address the issue of demo reels that your students need to find employment. One session (Studio View of Demo Reels, on Sunday, 21 July) focuses on game designers' demo reels, and the other (VFX Student and Intern Showcase, on Monday, 22 July) showcases visual-effects production. Other sessions explore open standards, undergraduate research, and multi-disciplinary collaboration in education.

On **Sunday** evening at 6 PM, you can treat yourself to “*Technical Papers Fast Forward*” where in just two hours in Hall A, you can watch the authors of all of the accepted papers each present their ideas to you in under a minute. In addition to being entertained, this will give you an idea of what papers and presenters will be of greatest interest to you during the individual sessions later in the conference.

SIGGRAPH 2013 offers several courses that focus on the subject matter that educators teach and/or subjects that educators may want to integrate in their teaching like VFX, physical computing, and new interfaces for musical expression. On **Tuesday, 23 July**, Art Papers such as *Early History of French Computer Graphics* and *The Emergence and Growth of Evolutionary Art 1980-1993* help students and educators understand the historical context of their academic pursuits.

Following the Art Papers on **Tuesday afternoon** is a Talks Session, *Multi-Disciplinary Collaboration in Education* that is scheduled to feature four different case studies. And immediately after that session, educators are invited back to the Education Booth for the annual *Educators Meet and Greet*, an informal reception that will be held from 4 PM to 5 PM. The always entertaining *Real-Time-Live* starts 30 minutes later at 5:30 in Hall A and concludes at 7 PM.

15 Production Sessions for games and films (including sessions looking at aspects of *Pacific Rim*, *Man of Steel*, *Iron Man 3*, *Epic*, *Monsters University*, and *Frozen*) provide even more opportunities for educators to learn about state-of-the-art applications. There are 152 Technical Papers and 7 Art Papers, 116 Posters, and approximately 75 Talks on a wide variety of topics of interest to educators. And, of course, educators can (and should) see the annual Computer Animation Festival/Electronic Theater (there are four different showings from which to choose), new products in the Exhibition, Emerging Technologies, and interactive/hands-on activities in the Studio.

Please keep in mind that your registration category determines the venues you may attend. It is anticipated that the categories will include the following: **Full Conference** registration allows access to virtually everything. **Conference Select** will allow access to the Art Gallery, Birds of a Feather, Electronic Theater and Computer Animation Festival, Emerging Technologies, Exhibition, Keynote Sessions, Real-Time-Live, Studio, and Technical Papers Fast Forward but does NOT include Courses, Panels, Technical or Art Papers, or Talks. **Exhibit Only** or **Exhibit Plus** registration does not include the Birds of a Feather, Computer Animation Festival, or Keynote Sessions in addition to the exclusions in Conference Select. For the latest information on what your registration does or does not include, check online: <http://s2013.siggraph.org/attendees/registration-categories>.

Have fun and enjoy the experience that is SIGGRAPH.

Marc Barr (Education Committee Chair; SIGGRAPH 2015 Chair)
Middle Tennessee State University

Glenn Goldman (SIGGRAPH 2013 Education Director/Liaison)
New Jersey Institute of Technology

EDUCATION BIRDS OF A FEATHER – 2013

Anaheim Convention Center 203B (Education BOF Room)

(Note: Birds of A Feather Sessions Require Full Conference or Select Conference Registration; Also Open to Exhibitors)

Sunday 9:00 AM – 10:00 AM

Cross-disciplinary Education (Bonnie Mitchell)

This BOF is for interdisciplinary educators, artists, scientists and researchers. Participants share experiences and discuss approaches to collaboration, integrated research and anti/multi-disciplinary creative production.

Sunday 10:00 AM – 11:00 AM

Visualization for Science and Engineering Education (Violeta Ivanova)

Animations and interactive media for teaching and learning and lessons learned from collaboration of artists with science and engineering faculty. Presented by MIT ARTEMiS visualization group. Co-sponsor: Education Committee.

Sunday 11:00 AM – 12:00 Noon

ACME Network (Jeannette Draper)

This Birds of a Feather session focuses on 15 trends in distance education to help strengthen your animation training programs, keep current and foster better relationships with industry.

Sunday – 12:00 Noon to 2:00 PM

Studio View of Demo Reels (Art Durinski)

Representatives from various animation and visual effects production studios talk about what they look for in student demo reels.

Sunday – 2:00 PM to 3:00 PM

SEAD: Innovation Thinking (Carol LaFayette)

Crafting the national conversation on innovation thinking: addressing cross-disciplinary learning across formal and informal experiences that engage the sciences and engineering with the arts and design.

Sunday – 3:00 PM to 4:00 PM

Learn by doing: using rapid prototyping game development events to enhance and augment the classroom experience (Foaad Khosmood)

Game jams, hackathons, and other fixed-time/rapid experiences for studying game development or interactive entertainment. Join Global Game Jam Director Foaad Khosmood in a discussion about game jams and the classroom.

Sunday – 4:00 PM to 5:00 PM

ASIFA-Hollywood Animation Educators Forum: What is the State of On-Line Animation Instruction Today?

(Dori Littell-Herrick)

Do online programs provide the same quality training as on-ground schools? Which topics work; which don't? Does online level the field through easier access, or short-change and build unrealistic expectations?

Monday – 8:00 AM to 9:00 AM

Tools and Trends Incorporating Multisensory Information in Science, Math, and Art Integrative Education

(Anna Ursyn)

This session aims to exchange methods, approaches and answers to programming with human senses in mind and will focus on apps and experimentations with processing.org, Arduino boards, and other trends.

Monday – 9:00 AM to 10:00 AM

3D Printing from the Experts (Ryan Hayford)

Hear from the experts about how 3D printing is changing the world and the value of particular technologies. David Cawley (Art Center College of Design) & John Miralles (LSU).

Monday – 10:00 AM to 11:00 AM

Art, Science, and Interactivity: creating engaging experiences in education (Rejane Spitz, Marcelo F. Pereira, and Maria das Gracas Chagas)

This session encourages the use of interactive approaches and techniques in education. Join us to discuss ways to promote creative and technical collaboration for the development of engaging educational projects.

Monday – 11:00 AM to 12:00 Noon

SIGGRAPH Education Committee: Undergraduate Research Alliance (William Joel)

Faculty and students from all institutions of higher learning are invited to join us as we discuss our undergraduate research efforts, our successes and failures, and future ideas.

Monday – 12:00 Noon to 1:00 PM

Integrated Help: Information at the Time of Need (Margaret Plumley)

A forum for discussing methods for breaking the classroom training model and bringing information and resources to artists in the context of their work.

Monday – 1:00 PM to 2:00 PM

Open Source in Graphics Education (Wobbe Koning)

Software licenses are a major financial burden for computer graphics programs. Can using free and open source software be a viable alternative to the "Industry Standard"? An open discussion.

Monday – 2:00 PM to 3:00 PM

Industry and Academia Collaboration for Better Education (Erik Noreke)

The rapid evolution of Khronos technologies poses unique challenges when it comes to providing training on the latest versions and assessing the expertise of software and hardware engineers and students. During this session, representatives from Khronos, academia, and industry discuss current collaborations and initiatives to address these challenges, and how this will affect employers and training institutions.

Monday – 3:00 PM to 4:00 PM

Creating Worlds of Art and Music (Aliza Sorotzkin)

With music, procedural animation methodology allows for a unique level of synchronization and experimentation. We will look at a range of assets created for music video and concert visual productions.

Monday – 4:00 PM to 5:00 PM

VFX Student and Intern Showcase (Aliza Sorotzkin)

Recent VFX students and interns showcase demo reels and breakdown their VFX and Game projects, explaining techniques and sharing lessons learned during their progression to working professional.

TALK SESSION: Multi-Disciplinary Collaboration in Education

Tuesday, 23 July 2:00 PM - 3:30 PM; Room 303AB (This Session Requires Full Conference Registration)

Session Chair: Glenn Goldman, New Jersey Institute of Technology



Exploring the Intersection of Art, Music, and Technology

Results of a collaborative learning experience between students from the visual arts and computing sciences that explores the intersection of art, music, and interactive technology.

Susan Lakin and Joe Geigel; Rochester Institute of Technology



Arts/Tech Collaboration With Embedded Systems and Kinetic Art

A cross-disciplinary collaborative course and curriculum that teams computer science students with art students to engage in joint engineering design and creative studio projects that involve embedded computing and kinetic artworks.

Erik Brunvand; University of Utah



Creating a Nimble New Curriculum for Digital Media Artists

A framework for immersive learning and new approaches to curriculum design that allow digital-media artists to collaborate on interdisciplinary media arts or design projects within virtual environments while pursuing individualized degrees.

Nicola Marae Allain; SUNY Empire State College



Best Practices in Short Animation Production in Private/Public Partnerships: An Agile Approach

Seneca College introduces its approach to facilitating production partnerships among education, industry, and government that has led to several successful high-profile short animated films such as "Ryan" (National Film Board of Canada, 2005), using as an example "Subconscious Password" (National Film Board of Canada, 2013), the latest film by director Chris Landreth.

Mark Jones and Sean Craig; Seneca College of Applied Arts and Technology