unification

04, los angeles, california
california

www.education.siggraph.org

Education Committee

SIGGRAPH2004

Contents

Director's Statement

SIGGRAPH2004

The SIGGRAPH Education Committee sponsors many different projects and committees that involve volunteers from around the world. The Education Committee is now 20 years in existence. This voluntary committee was reorganized into (3) three functional working groups to better facilitate work based on the goals and objectives of the Education Committee.

Goals

- To encourage and facilitate efforts that connect communities; collaborative connections that better our educational process and trigger innovation and creativity.

- To support projects and experiences that further the development of the field; to evaluate existing projects and new projects to ensure they meet the needs of the educator and learner.

- To provide global online resources; to achieve and develop resources for educators; to encourage the definition of a knowledge base for the computer graphics discipline and to identify curriculum and core competencies, innovative processes and learning pedagogy.

- To look at all the learners in the field; to discover how best to design instruction and instructional interfaces using cognitive science and human learning theory and to light the path for future educators so they can continue in the development of the field.

Much of the work done this year, as the new Director for Education, was in evaluating existing and proposed projects, restructuring the committee and organizing the budget to identify funding needs. In addition the committee has expanded participation with workshops, forums, the CGEMS advisory board and the intentional utilization of volunteer reviewers and jurors for our competitions. This has allowed for more people to participate in the activities of the committee.

Our activities are based on the work of volunteers. We urge you to donate your time, energy and ideas. Feel free to contact any committee member for information.

Colleen Case
ACM SIGGRAPH
Director for Education

The three functional working groups are:

1. Curriculum Knowledge Base
Led by Frank Brattain

Activities include curriculum workshops, and projects that include the definition of a knowledge base for the computer graphics discipline. This year we continue the curriculum workshop led by Cary Laxer and Gary Bertoline. It will include 15 additional participants from both education and industry to expand the work done in the 2003 workshop. We also plan to support the update of the Computer Generated Visualization resources material on our website; headed by Gitta Domik.

2. Building Community
Led by Dena Eber

Activities include international out reach, the development of online resources (CGEMS-The Computer Graphics Educational Materials Source is an emerging online refereed repository for curricular materials related to computer graphics– Joaquim Jorge), the redesign and implementation of the new Education Directory (William Joel), and participation in forums and other special projects. Our international participation includes our Eurographics liaison Werner Hansmann, our South American representative Rejane Spitz and our Asian representative Jiaoying Shi. A special thanks to Professor Shi, Steve Cunningham, Judy Brown, Cary Laxer, Zhigeng Pan, Michael McGrath, Werner Hansmann and the NSF for sponsoring and hosting the CGE04 Computer Graphics Education Workshop at Zhejiang University Hangzhou China.

3. Conference Activities
Led by Michael Mehall

The Education booth organized by Guanping Zheng is our key contact point at the conference; along with participation in the Education Program's (Tony Longson) opening and closing sessions and the resource room (Marc Barr). Our student competition winners work will be presented at a session in the Education program and displayed at both the booth and resource rooms. We hope to increase the visibility of these competitions. The SPACE (Student Poster and Animation Competition Exhibition), includes posters (Michael Mehall) and animations (Marty Altman). The SPICE (to be renamed TIME) competition includes standalone interactive projects and web-based sites (Stephen Wroble). Winners and other Education committee activities are documented in our catalog (Nancy Ciolek; Publications) and go on tour (Frank Brattain; Traveling Show) both nationally and internationally throughout the year. Our grant program (Mike McGrath) will sponsor 8 local high school instructors and 2 international educators program presenters. Rhonda Shauer acts as our webmaster and is in the process of making some structural and content updates to the site.

Community Building

Community Building Working Group Leader:
Dena Elisabeth Eber, Bowling Green State University
deber@bgnet.bgsu.edu

Please attend the following forums during the SIGGRAPH 04 conference so we may discuss and solicit input from computer graphics educators.

Wednesday, Room 502B, Los Angeles Convention Center
- CGEMS: Computer Graphics Educational Materials Source
  3:30 – 4:00 PM

- Building the World-Wide Community of Graphics Educators
  4:00 – 5:00 PM

Introduction and Overview

The fast pace of change in the computer graphics (CG) field makes it difficult for educators to continually design up to date, meaningful and robust curricula that address the full potential of the technology. The Community Building committee feels the most valuable resource for CG educators is access to an international community of people who teach digital media in all forms. It is the goal of this new committee to explore and implement a way that we can build that community and how we can provide a method for the people involved to share information. In addition, the committee will investigate how the CG community can collaborate to move disciplines that use digital media forward.

We need a system, preferably web-based, that educators can use to share information. What should that system be? What is the best way to build it? Ultimately, the online system could grow into an online community of interactions that will spur collaborations, foster creativity and make rich connections to further the field. How do we get to this end?

These are only a few of the concerns that this new committee will work with in the coming years.

Community Building

Since the beginning of the Internet, before the emergence of World-Wide Web, people used electronic bulletin boards (BBS) to connect with each other and share resources, files and other information. This was the start of online communities. Today, virtual or online communities have become common in the daily lives of millions of people across the world. As described in [Preece 2000], these communities arise out of groups and individuals who mainly cooperate to share resources and satisfy each other's needs. People join online communities mainly to socialize, work together, share ideas and engage in topical conversations. To build such communities there are a few steps to follow: (1) identify a target audience; (2) determine what tools must be provided to serve the purpose; (3) determine how to host or facilitate the community; (4) build it; (5) draw in members; (6) and nurture it [Boetcher et all. 2002]. Recent studies reveal that a shared common purpose appears to be the main indicator of success in an online community. Indeed unity of purpose is what drives people to connect, provide valuable information and to come back, not to be regarded just as non-contributors [Abras et all. 2003].

The Community Building committee will start with the Computer Graphics Educational Materials Source (CGEMS) as a foundation to explore how to address these issues to further build a community of computer graphics educators who communicate on a regular basis.

CGEMS: Part of the Community

In an attempt to build the community that we feel will foster growth in computer graphics education, Joaquim A. Jorge and Frederico C. Figueiredo have launched the Computer Graphics Educational Materials Source (CGEMS), which is a system that will help educators share materials. This system is one, among many other ways, to initiate discussions that address issues about bringing CG educators together to share information.

CGEMS is an online system that provides curricular material for computer graphics educators. The system includes a method for contributors to submit and editors to jury and control the quality of content to ensure sound and robust materials. The shape and components of CGEMS arose from fruitful discussions around, during, and after the Workshop on Computer Graphics Education (CGE02) held in Bristol, UK in July 2002.

The system supports a way for educators to easily access quality course materials and for contributors to share and get recognition for their curricular innovations. To learn more about and to become part of CGEMS, visit: *http://cgems.inesc.pt*

Goals

The fast pace of computer graphics and digital media technology create unique problems for educators in the field. Not only do we need to know about the technology as it changes, but we need to understand its implications so we can teach students how to use it in meaningful ways. A moving target such as this is hard to pin down and those in the field are best served if they can share innovations, understandings, curricula, and resources. A worldwide community of CG and digital media educators who share information will help alleviate these concerns and provide support unique to CG fields.

The SIGGRAPH Education committee's Community Building project will start by analyzing the success of the CGEMS project. We will use this as a springboard to further investigate ways to define and encourage interaction in the graphics community.
Specifically, we will address the following issues:
- How can we build a worldwide community of computer graphics and digital media educators?

- How we can provide a method for the people involved to share information?
- How can the community collaborate to move disciplines that use digital media forward?
- How do we build a system for educators to share information? What is the optimal system and what should it look like?
- How can the online community spur collaborations, foster creativity and make rich connections to further the field.

References

Abras et all. 2003] Abras C., Maloney-Krichmar D., Preece J., Evaluating an Online Academic Community: 'Purpose' is the Key, HCI International, Crete, June 2003.

[Boetcher et all. 2002] Boetcher S., Duggan H., White N., What is a Virtual Community and Why Would You Ever Need One??, http://www.fullcirc.com/community/communitywhatwhy.htm, accessed January 2004

[Preece 2000] Preece, J., Online communities: Designing usability, supporting sociability, John Wiley & Sons, 2000.

Curriculum Knowledge Base

Curriculum Knowledge Working Group Leader:
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Purdue University, School of Technology-Richmond
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The Curriculum Knowledge Base group members are Gary Bertoline, Frank Brattain, Gitta Domik, Lew Hitchner, and Cary Laxer. Our main emphasis this year has been on continuing the development of the matrices of knowledge, skills and abilities topic areas that were originally identified in a round-table discussion during SIGGRAPH 2002.

Last year during SIGGRAPH 2003, the Education Committee sponsored a workshop of focused dialogue on identifying areas of similarity in plans of study from institutions representing both computer science and fine arts. Attendees included faculty from Rochester Institute of Technology, Purdue University, Rose-Hulman Institute of Technology, Sierra Nevada College, and Willamette University among others. After several break-out sessions, the group returned to define a common core of topic areas that span the disciplines of both computer science and art.

This year the next iteration of the workshop series will focus on incorporating the perspectives of industry representatives as the topics list is further refined. Invitations to participate were limited to industries located within close proximity to the conference location. Our objective is to achieve a high certainty that the topic areas we focus on are indeed the most relevant to an over-arching discipline.

In the future, the Curriculum Knowledge Base group will take up the work on the Computer Graphics Technology Taxonomy Project established by Jackie Morie. The taxonomy will most certainly need to be updated from the standpoint of computer technology and significant emphasis will be placed on merging the taxonomy to the topics list developed during these workshops. The ultimate goal would be a series of learning objectives with defined competencies that will assist educators in computer graphics to benchmark a core curriculum for their programs.

It is an exciting time to be active in the development of CGT curriculum.

Report: 2004 SIGGRAPH/Eurographics CGE Workshop

A report on the 2004 ACM SIGGRAPH/Eurographics Computer Graphics Education Workshop
Zhejiang University, Hangzhou, China, June 2-6, 2004

Steve Cunningham, U.S. National Science Foundation, Arlington, Virginia, USA
Werner Hansmann, Universität Hamburg, Hamburg, Germany
Cary Laxer, Rose-Hulman Institute of Technology, Terre Haute, Indiana, USA
Jiaoying Shi, Zhejiang University, Hangzhou, China

The CGE04 workshop [04] was the third in a series of computer graphics edutaion workshops sponsored by ACM SIGGRAPH and Eurographics. These workshops focus on considering problems in computer graphics education and making recommendations based on those considerations. This report covers the discussion of teaching computer graphics in computer science and focuses almost entirely on teaching the beginning course in the subject.

Computer graphics courses grew up following a very few key textbooks that were based on the technology of the 1970s and 1980s, when graphics standards were 2D and clumsy, graphics was an expensive and nonstandard capability, and there were no standard graphics tools. Faculty who taught graphics grew up in that environment and it was difficult to get people to think about the computer graphics course in a new and more general setting. Computer graphics had the reputation of being very difficult and very mathematical, as it originally was.

In 1999 we agreed that the "graphics pipeline"—the computation process that takes 3D geometry in Euclidean modeling space and converts it to pixels on a screen—was key to the beginning graphics course [99]. This implied that the fundamental modeling paradigm for the beginning course would be polygons, or what we identified at the workshop as "triangles with vertex attributes." We also noted the importance of including interaction techniques in that course and on recognizing that graphics students need to know the visual effect of some choices in the pipeline processes.

In 2002 we described particular aspects of the subject that a student should know on completing a beginning graphics course [02]. Many of these expanded steps in the pipeline and so reinforced the 1999 statement; some involved newer capabilities in more modern graphics systems and represent newer capabilities. These topics are
- Transformations
- Modeling: primitives, surfaces, and scene graphs
- Viewing and projection
- Perception and colour models
- Lighting and shading
- Interaction, both event-driven and using selection
- Animation and time-dependent behaviour
- Texture mapping

This is a much more specific statement about course topics than the 1999 workshop produced. While it continues to look at "triangles with vertex attributes," it is clear that the attributes being considered are colors, normals, or texture coordinates. In the future we expect the list of vertex attributes to expand to include such concepts as vertex shaders. We noted that computer graphics courses play

very different roles in different universities, so while we present these topics as a general goal, we expect that when a program clearly has a different need, it could be expected to take a different tack for the beginning course.

In 2004, we started by asking participants think of questions about teaching computer graphics. This was very free-form and nearly two dozen questions found their way to the board. From this list, we started grouping topics and focusing on what was most important to the group, and we found ourselves looking again at the beginning graphics course. We looked particularly at the concept of whether computer science students should have access to learning about computer graphics — everybody's computer has this capability and it seemed wasteful to teach computer science without giving students a chance to learn about it. Our first statement, then, was this:

Every undergraduate computer science student should have the opportunity to have at least a meaningful introduction to computer graphics.

We were explicit about the word "every" and intended this to mean all postsecondary institutions: two-year colleges, polytechnics, liberal-arts schools, regional comprehensive universities, and major research universities. This is at variance with the ACM/IEEE Curriculum 2001 recommendations that identify only a very small amount of graphics as important in computer science. This has enormous implications because most postsecondary schools do not currently teach computer graphics, either through a graphics course or as part of another course, and most computer science faculty do not have a background in the subject. We realize that this statement means that we must define a course that can be taught without lot of difficult faculty development. Fortunately, the graphics capabilities of modern computers and the availability of sound graphics APIs give instructors enough tools that this is now possible.

For the course itself, we identified the course goals using an outcomes-based definition of *learning* that has three components: what the student knows, what the student can do, and what attitudes and approaches the student has developed. These seemed to map onto some of the questions so we looked at the beginning course in these terms. The 2002 workshop had focused on what the student should *know*, and we saw little need to look further at this set of basic concepts. The other parts of this definition of learning opened new directions for us. The question of what a student could *do* led to a realization that many projects in graphics courses look only at making images without any thought of what the images might mean, and we decided that a course should help a student realize that the images he or she makes can communicate useful information.

The question of what kinds of *approaches* to problems a student should learn led us to a consideration of how graphics is part of problem-solving and we were able to use a "visual mantra" from Mike Bailey (right) to illustrate this approach. These were important insights for our discussions.

In the end we used these three components to describe the nature of the beginning computer graphics course as we see it at the start of the 21st century. We believe that these will help faculty develop a course that gives the student important tools as well as a sound background for more graphics work.
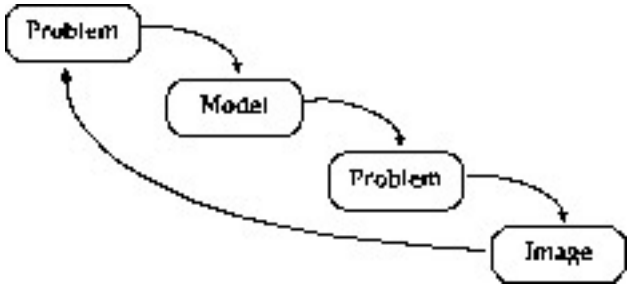
1. What the student should know:
The student should understand the processing implied by the graphics pipeline and polygon-based modeling with vertex attributes, including the following components:
- Transformations
- Modeling: primitives, surfaces, and scene graphs
- Viewing and projection
- Perception and colour models
- Lighting and shading
- Interaction, both event-driven and using selection
- Animation and time-dependent behavior
- Texture mapping

These knowledge topics are intended to be independent of the graphics API and hardware used in the course, and should be largely independent of such problem-structuring tools as the scene graph. In general we believe that this knowledge should be conceptual and should not require that the student implement the various algorithms and processes that go into these topics. This can be supplemented by student implementations of some of these topics as time permits, but such implementations should not supplant the visual communication and problem-solving discussed below.

2. What the student should be able to do:
The student should be able to use a modern graphics API to create a graphics application that can be integrated with other computer applications.

This learning is primarily focused in the projects that accompany a graphics course, and we suggest that these projects should not be artificial exercises that use graphics without reference to application areas but should integrate graphics with areas where the graphics is a key component. We further suggest that the projects should emphasize the quality of the communication or presentation that the students' images will create [VL].

3. What approaches the student should bring to a problem:
In the traditional problem solving process we see several steps: recognizing a problem, building a model of the problem from whatever knowledge is available, developing a tentative solution to the problem based on that model, and testing the tentative solution against the problem. Any shortcomings of the tentative solution are identified, and the model and solution are then revised to address

these shortcomings. This cycle continues until a satisfactory model and solution have been found.

A student who has studied computer graphics should have experience with thinking visually about problems, and so the student should be able to take the model and create a visual representation of the problem or model that can help develop a tentative solution. In a graphics course, this corresponds to the part of the figure at left labeled "model —> image". Thus the student with a computer graphics background should naturally think of creating a visualization for a problem as a way to think about it or communicate it to others, and this as a way to help create a tentative solution.

We recognize that there are circumstances when a beginning graphics course can have different kinds of learning goals than those above. An example might be a first course in a graduate sequence that leads to advanced degrees in computer science with a computer graphics specialization. But with these goals serving to define a standard beginning course, a program having a different kind of course should be able to give its own set of learning goals and use them to identify how their course differs from the standard course and why this difference is important in their program.

References: The Web sites below give reports of previous workshops and the Call for Participation for the 2004 workshop.

[99]   http://www.siggraph.org/education/conferences/GVE99/index.html
[02]   http://www.siggraph.org/education/bristol/bristol.htm
[VL]   http://www.siggraph.org/education/vl/vl.htm
[04]   http://www.cad.zju.edu.cn/cge04/

Workshop participants:
Qin Aihong, Shanxi University
Shanshan Chen, Fudan University
Xie Cui, Dalian Maritime University
Steve Cunningham, CSU Stanislaus, National Science Foundation
Peter Giles, Australian Film & Radio School
Werner Hansmann, University of Hamburg
Cary Laxer, Rose-Hulman Institute of Technology
Berndt Lutz, IGD, Fraunhofer Institute for Computer Graphics
Eric Paquette, ETS Montreal
Russell Pensyl, Beijing School of Software
I-fen Shen, Fudan University
Jiaoying Shi, Zhejiang University
Kelvin Sung, University of Washington Bothell
Elizabeth Sweedyk, Harvey Mudd College

Report: Visual Learning in Science and Engineering

Visual Learning was the focus of one track of the 2004 ACM SIGGRAPH/Eurographics Computer Graphics Education Workshop
Zhejiang University, Hangzhou, China, June 2-6, 2004

Judy Brown, University of Iowa, Iowa City, Iowa, USA

Visual Learning is the use of graphics, images and animations to enable and enhance learning in science and engineering

Background of Workshop

Visual learning was the focus of one track of the ACM SIGGRAPH/Eurographics Workshop on Computer Graphics Education held June 2-5, 2004, in Hangzhou, China. Many conferences have been organized by Zhejiang University in Hangzhou, but this was the first specifically dedicated to education. This track was a follow-up to the ACM SIGGRAPH/Eurographics Campfire on Visual Learning held in 2002 in Snowbird, Utah. (See http://www.siggraph.org/education/vl/vl.htm). Participants represented engineering, computer science, information science, web design, instructional design, and fine arts. A full report will follow after these ideas are discussed at related conferences this year.

The goals of the Hangzhou visual learning workshop were to:
- refine the ideas from the 2002 campfire
- merge these ideas with new insights, especially those from the new Chinese participation
- recommend implementation guidelines for visual learning in science and engineering.

"Visuals" include symbols, animations, and even body language and gestures. Visuals may further enhance learning when combined with auditory and other sensory functions as an integrated learning experience. This workshop focused on computer-graphics based images and animations.

Findings

The discussion was lively; and the following key points emerged:
1. Students must understand the visuals if learning is to occur. These include visuals the students create as they learn, and visuals viewed as the instructor illustrates concepts. Two examples illustrate this point:

Use examples from science and engineering.In order for science and engineering students to understand the images, they may need to see the value of them, by having the examples drawn from science and engineering.

Students at the Dalian Maritime University in China learn complex navigational skills through immersive virtual reality created by the students *(image 1)*.

Creating simple computer graphics can be a powerful strategy for learning basic principles of computer science.

Students at Clemson University create images with a raytracer. They can tell immediately if the image is accurate, and can easily correct their mistakes because the images point back to the

underlying problem. Both correct images and mistakes enable learning. This image was produced by sophomore student S. Duckworth *(image 2).*

2. Students can learn science effectively by creating their own visuals.
When students create visuals as part of learning science and engineering, they must work with fundamental principles in the field and must learn how these principles function as part of larger systems. Creating images is an active learning technique, and sharing ideas through visuals makes the student understand principles well enough to communicate them to others. We can see "visualizing to learn" as a parallel to the established "writing to learn" education process. The graphics capabilities of modern computers support

1

2
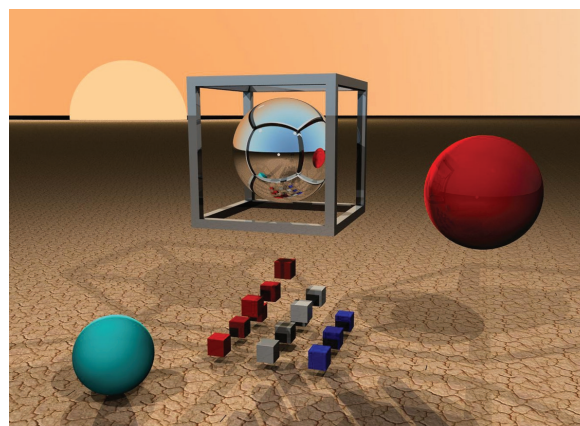
many graphical tools, both simple and complex, that students can use in this work. However, textbooks and coursework in science and engineering do not yet include student visualizations as standard projects, so professors in science and engineering now need to learn how to include student visualization activities in their courses. This image is a visualization of polarized light by Virginia Muncy *(image 3)*

3. Strong, diverse opinions exist regarding how much students need to know about design principles.
Some participants felt that science and engineering students need to know design principles so they can create "good" visuals. This raised the question about which design principles students need to learn as well as where the knowledge of design needed to be on the continuum from competency to fluency. An opposing point of view held that students learn from images, whether they represent good or bad design. As Dr. James Foley asked a week later at the VRCAI and Graphite Conferences in Singapore, "How do we know when a graphic is 'good enough'?"


3
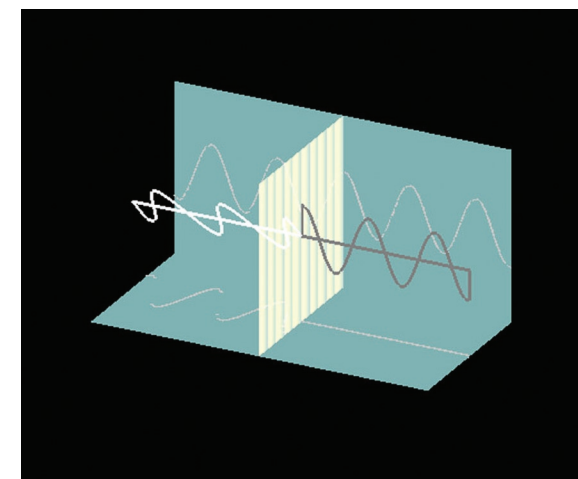
4. Cultural understanding of images is important.
The challenges are to know and understand the cultural differences and distinguish which differences are critical for understanding the concepts. We think the best option is to retain and embrace cultural differences. Yet we want to be understood.

This image illustrates Virtual Dunhuang Cave Art. The image is from a virtual environment of one of the caves at Dunhuang, China. The image is by Bernd Lutz, Fraunhofer Institute, Germany *(image 4).*

4

One solution for understanding content without losing or being confused by the cultural differences is to try to understand what is content and what is the "wrapper" of culture. We could explain cultural concepts with an additional metadata wrapper as shown in the following diagram.

Content   Culture as a wrapper   Content and culture connected, and a metadata wrapper that explains the cultural concepts
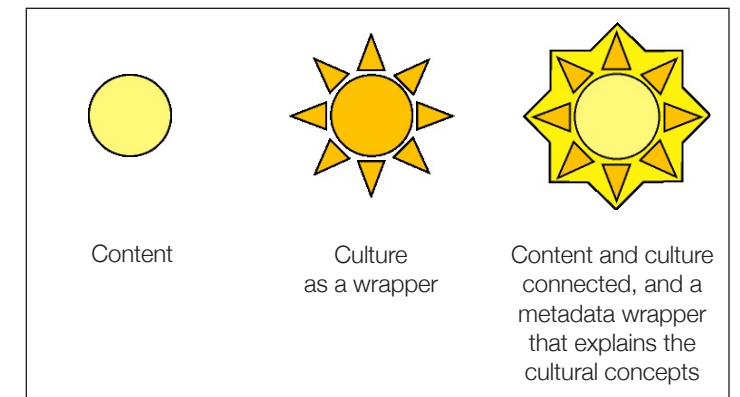
5. Verifying proficiency in creating and understanding visuals can guide curriculum and assist employment.
In Europe, there is now a Computer Driver's License that verifies someone has basic computer skills. There is a test to get this license, and it may become a criteria for gaining employment. In the sciences, a similar "visual driver's license" might be based on the following triad:
- knowledge of the content or message being presented
- skills needed to understand the visuals
- skills needed to produce the visuals

The "license" certifies a minimum set of skills, and there was interest in defining these minimal skills.

6. Numerous strategies can address the needs for visual learning in science and engineering.
Approaches will vary by country, culture, and type of college, university or other educational source. Traditional curricular approaches might be to:
- require an existing visual learning course
- modify an existing course to include visual learning elements
- create a new required course
- create a new elective course

Courses need not be credit-bearing. A student's goal may be to acquire competency rather than complete graduation requirements. Other issues include cross-cultural support, including multi-language issues, and technical multi-platform issues, There was a suggestion that ACM SIGGRAPH sponsor online modules or a course to supplement programs worldwide. Regardless of strategy used, measures of success and evaluations of effectiveness must be conducted and communicated.

SPACE Student Poster Competition

The Poster/Print portion of the SIGGRAPH Student Poster Animation Competition and Exhibition (SPACE) for 2004 is a display of excellent design and technical proficiency. This year's SIGGRAPH Education Committee sponsored competition was based on a theme of "Unification". Over 200 international participants reflected a broad range of interpretations of this year's theme. After its premiere at the annual SIGGRAPH Conference in Los Angeles this summer, the show will be made available for viewing around the world. For more information regarding the SIGGRAPH Education Committee, please visit our website: http://www.education.siggraph.org.
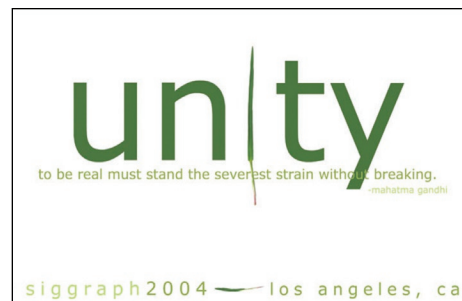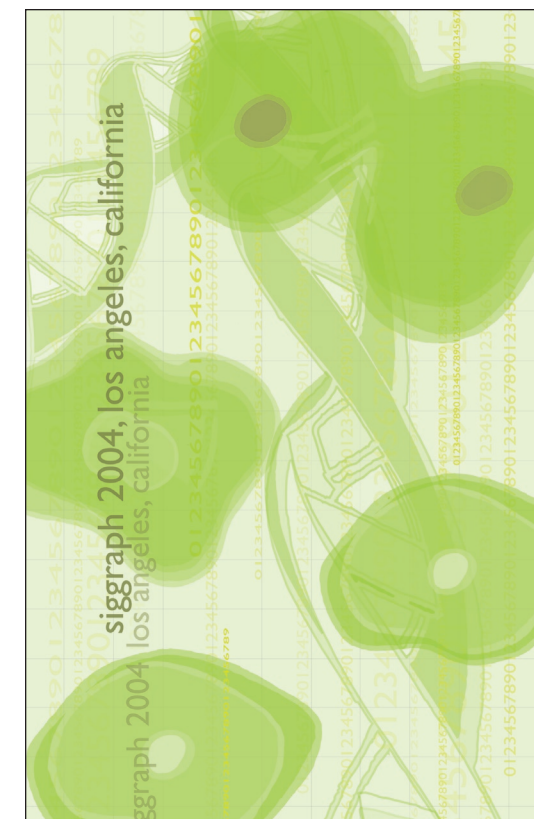
College/University Competition

Honorable Mentions

Paula Angel
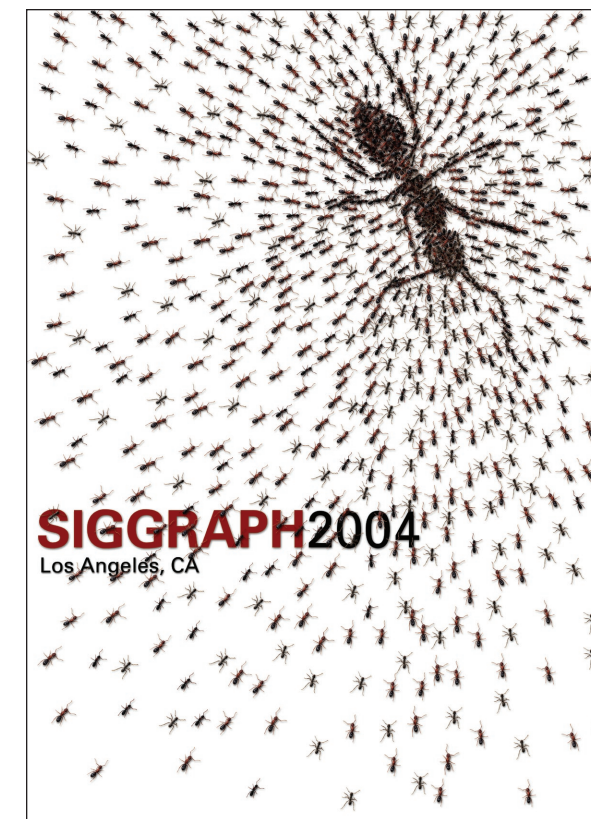Valencia Community College
Instructor: Kristy Penino

Charanjit Chana
Kingston University
Instructor: Paul Honey

Adam Copp
East Tennessee State University
Instructor: Cher Cornett

Angela M. Dather
South Dakota State University
Instructor: Michael Steele

Sonya Delebreau
University of Wisconsin-Stevens Point
Instructor: John O. Smith

Christy Douglass
Johnson County Community College
Instructor: Stephanie Sabato

Kristin B. Gunnarsdottir
Johnson County Community College
Instructor: Jill Coppess

Katie Landwehr
University of Wisconsin-Stevens Point
Instructor: John O. Smith

Matthew Lock
The College of New Jersey
Instructor: Phillip Sanders

Ashley Maize •
Johnson County Community College
Instructor: Stephanie Sabato

Pat Mapes
University of Northern Colorado
Instructor: Dr. Anna Ursyn

Valerie McElreath
East Tennessee State University
Instructor: Cher Cornett

Aaron B. Murray
Middle Tennessee State University
Instructor: Guanping Kheng

Craig Oren
University of Wisconsin-Stevens Point
Instructor: John O. Smith

C. Bryan Phelps
University of Northern Colorado
Instructor: Dr. Anna Ursyn

Stephanie A. Relaford ••
Johnson County Community College
Instructor: Jill Coppess

Josh Rossman
South Dakota State University
Instructor: Michael Steele

Jennifer Ruzsa
South Dakota State University
Instructor: Michael Steele

Michael Siezew
Schoolcraft College
Instructor: Michael Mehall

Tod Stephens
International Academy of Design & Technology
Instructor: Harry Spirides

Jang Sun Young
Chung Ang University
Instructor: Jin Wan Park

Kyle Waszkelewicz
Eastern Connecticut State University
Instructor: Marlene Ayers

K-12 Competition

Honorable Mentions

Nathan Lockwood •••
Homewood-Flossmoor High School
Instructor: Lorelei Jones

Caleb Padgett
Homewood-Flossmoor High School
Instructor: Lorelei Jones

College/University Competition

First Place

Kristie Klein
University of Wisconsin-Stevens Point
Instructor: John O. Smith

Second Place

Pranav Mistry
IDC IIT Bombay
Instructor: Ravi Poovaiah
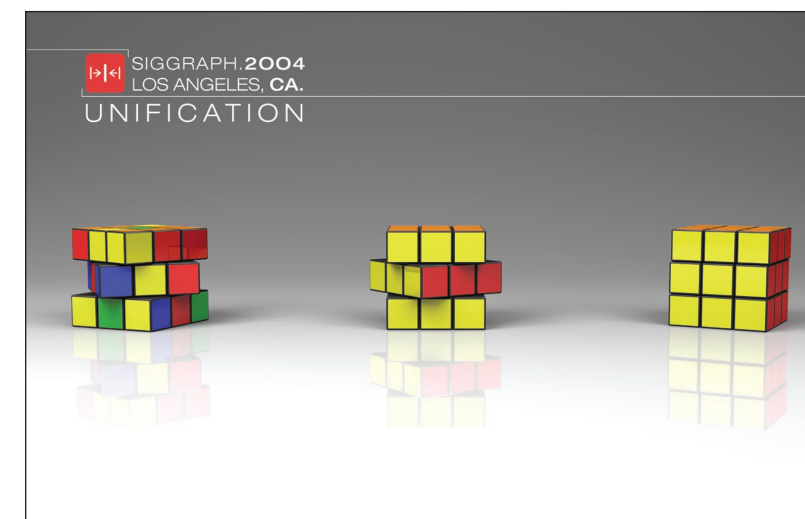
Third Place

Jeffrey Gladden
School of Informatics at Indiana University
Instructor: Susan Tennant

Coordinator

Michael Mehall, Associate Professor
Schoolcraft College

Jurors

Catherine Begle, Schoolcraft College

Michael Crumb, Macomb Community College

Ralph Franklin, University of Michigan

Patrick Lichty, Intelligent Agent Magazine

Celia McCulloch, Schoolcraft College

John Mijatovich, College for Creative Studies

Marla Schweppe, Rochester Institute of Technology

Robert Vigiletti, College for Creative Studies

SPACE Student Animation Competition

Over the last year, students from schools in a number of countries around the globe have been working toward getting their submissions prepared for this competition. This year's SPACE animation competition includes a total of 170 entries, from some 70 schools, in 12 countries. There is a wide range amongst the submissions. Some are simple, and some are less so. Some tend toward photo realism, some are whimsical, and still others are experimental or abstract in nature. Some focus more on technique, while some try to tap into the emotions of the audience.

This was a transition year for the animation competition. We are actively working on proto-type tools and processes with the intention of streamlining the logistical effort, and with an eye toward expanding the outreach of the competition in the future. This is an active area of work, and includes raising the visibility of all the student competitions sponsored by the Education Committee.

In preparation for the jury process, each submission was edited as necessary to remove or obscure any logos or markings which might indicate who did the work, where it was done, or what tools were used. This was intended to put all the submissions on equal footing, so each could be judged entirely on its own merits. These jury edits were compiled onto 3 DVDs for viewing by the jury members. Each jury member received a jury packet containing copies of the 3 DVDs, jury instructions, and various other relevant information.

The jury members then proceeded individually through their selection process to determine which of the submissions should be accepted for presentation at the conference and which should not. This was not a trivial matter, whether you consider the number of submissions or the breadth of content and quality. Once each jury member had made their selections as to which submissions were to be accepted, they then proceeded to rank the top sub-missions within each of the categories of Fine Art / Experimental, Storytelling / Narrative, Character, and Visual Effects. Jury members utilized the prototype web-based mechanisms to record their selections and rankings. After the jury members had recorded their decisions, the results were tallied.

The next step involved preparation of the accepted submissions, to include category winners and honorable mentions, for presentation during the Educator's Program at the conference in Los Angeles. For presentation purposes the submissions are used in their pristine form, including logos and credits and such.

The jury selected 51 works, from some 27 schools, for acceptance and presentation at the conference, which represents approximately the top 30% of the submissions. Further recognition is noted in two ways for the 20 best works. Of these four are distinguished as Category Winners, The Blue Flight by Youngok Kim (Fine Art / Experimental), Venice Beach by Jung-Ho Kim (Storytelling / Narrative), Mina Skates by Jaime Landes (Character), and Divya by Siddharth Archrekar (Visual Effects). The other works in the top 20 are awarded the distinction of Honorable Mention.

Honorable Mention

107.6 Degrees
Amila and Patrik Puhala Art Institute of Portland

Birdon
Chieh Huang (Jackie)
Academy of Art College San Francisco

Loose Screws
Joseph Kim
Design Centre Enmore, TAFE

One By Two
Hardeep Kharbanda, Suruchi Pahwa
Rochester Institute of Technology

Going Up?
Marci Ellis
Ringling School of Art and Design

Showdown
Matthew P. Johnson
Otis College of Art and Design

Hopeless Romantic
Bill Burg
Pratt Institute

Awkward
Cesar Kuriyama
Pratt Institute

Anything for a Buck
Dave Hardin
College For Creative Studies

(no title)
Henri Tan
Vancouver Film School

Celesais
Dustin Lindblad
Vancouver Film School

Cold War
Brian Garrigan
School of Visual Arts

Sargasso
Jeremy Eliosoff
Sheridan College

Lady Shaves
Mike Altman, Steve Galgas
Ohio State University

Machine
Jason W. Davies
Savannah College of Art & Design

The Journey
Amit Barman
Clemson University

Category Winners

Fine Art / Experimental

Title of work	The Blue Flight
Student	Youngok Kim
Department	Film/Animation
School	School of the Art Institute of Chicago
Instructor	Chris Sullivan

Storytelling / Narrative

Title of work	Venice Beach
Student	Jung-Ho Kim
Department	Experimental Animation
School	California Institute of the Arts
Instructor	Michael Scroggins

Character

Title of work	Mina Skates
Student	Jaime Landes
Department	Computer Animation
School	Ringling School of Art and Design
Instructor	Jim McCampbell

Visual Effects

Title of work	Divya
Student	Siddharth Archrekar
Department	Visual Effects
School	Savannah College of Art & Design
Instructor	Joe Pasquale

Coordinator
Marty Altman, School of Film and Digital Media, University of Central Florida

Jurors
John Kundert-Gibbs, Director
Digital Production Arts
Clemson University

Stephen Komp, Assistant Professor, Department of Visual Arts and New Media
SUNY College at Fredonia

Barbara Mones, Senior Lecturer Graphics/ Animation, Computer Science & Engineering
University of Washington

Francis McAfee, Assistant Professor
Tower Center for Electronic Communication
Florida Atlantic University

Azhar Ahmad Salleh, Head of Film & Animation, Faculty of Creative Multimedia
Multimedia University, Malaysia

Jeremy Moorshead, Professor of Animation
Film and Digital Media Department
Savannah College of Art and Design

Darlene Hadrika, Freelance Animator
Orlando, Florida

SPICE Interactive Media Competition

Each year, the ACM SIGGRAPH Education Committee sponsors the Student Interactive Media Competition. The competition is open to all students and serves as a showcase for advanced interactive computer graphics techniques. This year, students were asked to create a project designed to inform, or educate the user. The competition was not limited to formal academic subjects.

There are two categories in the competition: The Online Projects Category is for projects intended for distribution on LANs or on the internet. These projects would typically be viewed using a web browser with commercially available plug-ins. The Stand Alone Projects Category is for projects intended for distribution via CD, DVD, kiosk, or personal computer. These projects would typically consist of a self running executable file sometimes with linked data files.

Entries were judged on the basis of design, originality, interactive techniques, technical excellence, and artistic merit. The jury was looking for submissions that pushed the limits of the technology and that provided a rich experience for the individuals who interact with the work.

This year, two winning entries were chosen, one from the Online Category, and one from the Stand Alone Category. The jury also awarded an Honorable Mention to one entry from each category.
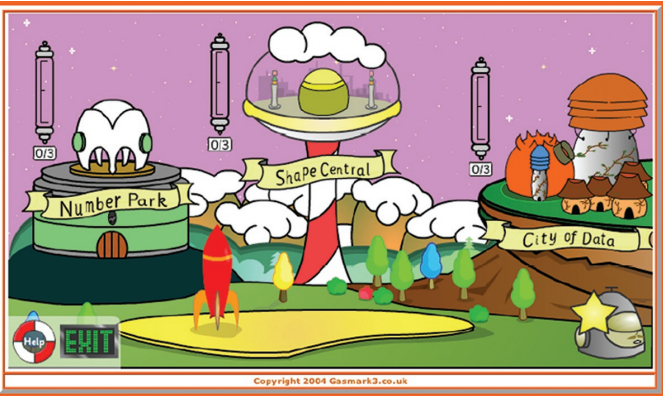
First Place, Online Category

David Wilce, Trevor Summers, Craig Dodd
Project Name: Cosmic Numbers
http://www.gasmark3.co.uk/cosmicnumbers/
Instructor: Melissa Lee Price

Honorable Mention, Online Category

Luke Whittaker
Project Name: A Break in the Road
http://www.lukewhittaker.co.uk
Instructor: Mike Parsons

First Place, Stand Alone Category

Jin Young Kim
Project Name: Milko's Milk Delivery
Instructor: Mark Badger

Honorable Mention, Stand Alone Category

Adam Banks
Project Name The American Revolution
Instructors: John Thornton, Karen Girton-Snyder

Coordinator
Stephen Wroble, Associate Professor, Computer Graphics Technology, Schoolcraft College

Jurors
Rob Avie, Senior Systems Analyst, Vi-Spec, Inc.

Mark W. Erickson, Senior WBT Graphic Designer, Ford Motor Company Design Institute/MSX International

Christopher Inman, Senior Flash Interactive Developer, Halo Street LLC

Scott Tykoski, Developer/Artist, Stardock Corporation

April Welch, Director of Educational Technology, CCTS , DePaul University

Tracy A. Williams, Graphic Designer, IBM

FSSW Faculty Submitted Student Work

The Faculty Submitted Student Work project (FSSW) has transformed itself in the same ways that the computer arts field has changed over the years, from slide trays to interactive disks. The same can be said about the computer arts field as a whole.

On one level the FSSW has become a slice of time in which we see software trends and teaching techniques, changing over time. The quality and type of tools used has changed enormously and continues too.

The FSSW is an interactive CD of college faculty submitted computer art work. The jury's are the professors that submit the work of their best students. It is made to be an overview of what is happening on the department level and to showcase good projects and teaching ideas that would not be seen any other way. Our hope is that it will inspire better course work and be used as a resource by other educators.

The results of 2003-2004 will be on exhibit in the Educational booth in Los Angeles for SIGGRAPH 2004.
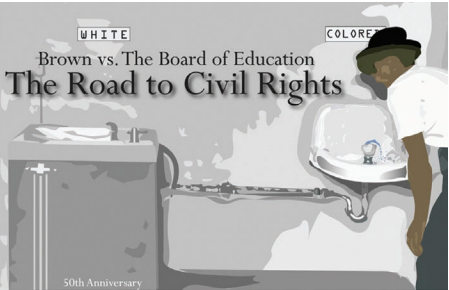
The Art Institute of Dallas

Title: Underground
Professor: Michael R. Eudy
Concept: A 3D animated movie short.
Objectives:For the students to work together in a mock company environment (Polygrinder) and produce and animate a short film.
Hardware: Mac
Software: 3D Studio MAX, After Effects, Combustion, PhotoShop
Category: Animation Group Project

Paul Slusser	Josh Lewis
Troy Griffin	Andez Gaston
Danny Richardson	Anderson Gaston
Danny Rodriquez	Kevin Steele
Shane Boydston	Rhea Lewis
Adam Schuman	Chris Moffitt
Davod Pastrana	Colton Shaver
Emilio Santoyo	Sarah Braun
Randall Smith	Jacob Cook
Greg Callahan	Barry Rooney
Mitch Cotie	

The Art Institute of Portland

Title: Senior Project
Professor: Nance Paternoster
Concept: Final full semester project in animation or modeling.
Objectives: Pushing their strengths further deepening their skill set.
Software: MAYA/3D Studio MAX
Category: Animation

Seniors:	
Patrick Puhala	Derek Bletsoe
Amila Puhala	Hai Nguyen
Adam Perin	Gary Hughes
Zack Mark	Chris Wilson
Aaron Sturgeon	
Don Flures	
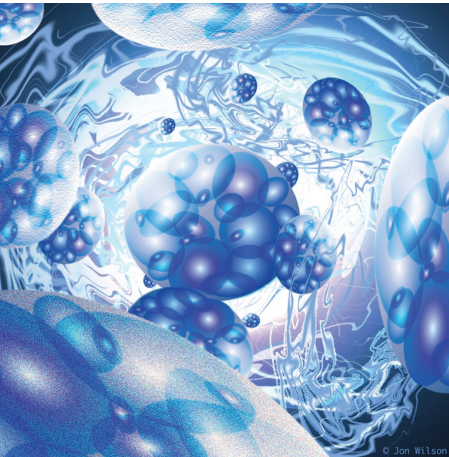
Chung-Ang University

Title: Personal VR Gallery with Realtime Game Engine
Professor: Jin Wan Park
Concept: Virtual Art Gallery Project with Real-Time Game Engine.
Objectives: Learning a game engine is not an easy task for the Fine Arts students. So I let students use a game engine as a VR installation tool. Most of their VR works later evolved into the physical artworks. Game Engine for Fine Arts was the main concept of this course.
Hardware: PC
Software: Jupiter and Unreal
Category: Multimedia

Graduate Students:
Hyeok Yeon
Ji Seon Choi
Hyung Kyung Ji
Tae Kyung Yoo
Jae Hwan Lee
Jun Eui Lee
Joo Hyoung Kim
Su Ran Park
Sung Soo Kim
Kil Sang Yoo
Jin Suk Chea
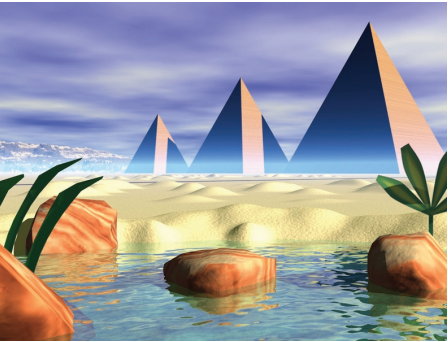
The College of New Jersey

Title: Digital Imaging for Interactive Project
Professor: Philip Sanders
Concept: To work with digital images to be used in interactive project.
Objectives: To work with digital image for interaction
Hardware: PC. MAC
Software: PhotoShop, Illustrator, Bryce
Category: Graphic Design

Kevin Conroy	Junior	*Rift*
Robert LaPlaca	Sophomore	*Blur*
Loren Lee	Junior	*Summer of Digital Photography*
Brian Liloia	Sophomore	*New York Contrast*
Michael Millspaugh	Sophomore	*Three Pyramids*
Nick Sarnelli	Junior	*Untitled*
Jim Stiles	Senior	*The Hamster*
Montigue Woodland	Sophomore	*St. Valentine*
Matt Nye	Senior	*Looking Good*

Lycoming College

Title: Project One: Underground Railroad public art project
Professor: Lynn Estomin
Concept: Work collaboratively to document seven Underground Railroad sites in Lycoming County PA and design 10'x3' banners to be digitally printed on waterproof canvas for outdoor display in public places.
Hardware: Mac G4
Software: Adobe Photoshop
Category: Graphic Design

Students:
Amy Beaver
Jasmine Campbell
Shakhanda Jimenez
Shelly Klein
Mattew Nye
Matthew Kondrath
Siobhan Horton
Matthew Ulrich
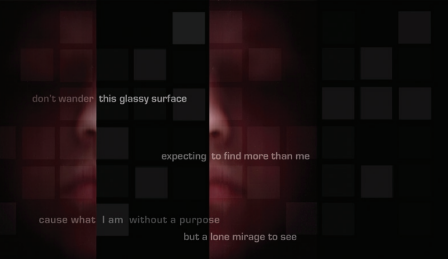
Title: Project Two: Great American Smoke-Out
Hardware: Mac G4
Software: Adobe Illustrator
Concept: Using Adobe Illustrator, design a poster 22"x 34" that encourages students to quit smoking to be displayed in the area outside Academic Center where student smokers congregate.
Category: Graphic Design

Matt Nye	Senior	*Looking Good*
Amy Beaver	Senior	*Win $1000*
Mike Delbuono	Senior	*Jack*
Matt Ulrich	Senior	*Naughty or Nice*
Matt Kondrath	Senior	*Wanted*
Shakananda Jimenez	Senior	*Bones*
Shelly Klein	Senior	*Birthday*

Title: Project Three: Self Portrait
Hardware: Mac G4
Software: Adobe Photoshop
Concept: Using Adobe Photoshop, combine at least two original photographs to create a seamless composite that makes a statement about who you are.
Category: Graphic Design

Matthew Shaeffer	Senior	*Self-Portrait*
Scott Paparella	Senior	*Self Portrait*
Jen Mainwaring	Junior	*The Minds Landscape*
Garrett Cimms	Junior	*Computer Screen*
Lauren Detwiler	Junior	*Self-Portrait*
Cammile Oreilli	Senior	*Self-Portrait*

Title: Project Four: Symposium Poster — Road to Civil Rights
Concept: Design an 11'x 17' poster advertising one of the following College Symposiums: "the Road to Civil Rights-50th Anniversary of Brown vs. Board of Education" or "The Human Genome Project"
Hardware: Mac G4
Software: Adobe Illustrator
Category: Graphic Design

Carrie Firman	Junior
Tim Eaton	Junior
Kim Colline	Junior
Jen Mainwaring	Junior
Jared Weller	Junior ••
Kari DeAngelis	Junior
Miranda Newcomber	Junior
Jessica Engle	Junior

Macomb Community College

Title: Photo Real Illustration
Professor: Brian Sauriol
Concept: Render an Illustration of an object.
Objectives: Mastery of PhotoShop and Illustrator
Hardware: Mac G4
Software: PhotoShop , Illustrator
Category: Illustration

Chad Lowney	Senior	*Corvette*
Brooke England	Junior	*Viper* ••••••••
Tracy Turner	Senior	*Mustang*

Title: Calm
Professor: Ron Hood
Concept: Photo Illustration
Objectives: Mastery of PhotoShop
Hardware: Mac G4

Software: PhotoShop
Category: Fine Art

Lynette Reed	Junior	*Calm*

Title: Interface Design — Portfolio
Professor: Michael Crumb
Concept: Portfolio Interface
Objectives: Mastery of Interactive Interface
Hardware: Mac G4
Software: PhotoShop, Dreamweaver, Flash, Director
Category: Multimedia

Mark Matta	Junior
Tim Buchanan	Senior

Title: Photography
Professor: William Soule
Concept: Digital Photography
Objectives: Mastery of Digital Camera
Hardware: Mac G4
Software: PhotoShop
Category: Photography

Mark Matta	Junior	*photo1 & 2*

New Jersey Institute of Technology

Title: Painting Reconstruction and Analysis
Professor: Glenn Goldman
Concept: The use of paint programs to re-create expressive/evocative paintings of architecture and landscape that were originally created with traditional media and presen-tation to class of an analysis (color, composition, etc.) of the original painting. Objectives: (1) To introduce students to graphic capabilities of a computer to illustrate that the computer does not dictate a particular style of output. (2) To provide opportunities for students to become comfortable with a mouse as a graphic input device. (3) To introduce students to art and generate discussions about art, composition, color, art history, perspective, etc., as they study various ways landscape and buildings have been expressed in art.
Hardware: Mac G3
Software: Corel Draw, Painter
Category: Architecture

Raymond Chow	Freshman
Joshua Prol	Freshman

Title: Island Sanctuary and Retirement Home
Concept: The design of an island studio and associated 2,500 square foot(+/-) lakefront residence in New England with a limited and abstracted palette of materials-the structural characteristics of which place strict limitations on formal solutions.
Objectives: (1) To introduce the student to three-dimensional modeling and rendering with computers in the context of architectural design.
(2) To introduce students to design problems within an architectural context in which they have to consider architectural program site (physical context) , and structural properties of a limited palette of materials.
Hardware: P4 PC, XPPro.
Software: 3D Studio MAX, AutoCAD, Lightscape, Photoshop, Painter
Category: Architecture

Trevor Scott Nauta	Freshman
Andre W. Pause	Freshman
Cliff Lau	Freshman

Joshua Prol	Freshman
Justin Foster	Freshman
Raymond Chow	Freshman

Title: Poznan Center Reconstruction
Professor: Peter Pelsinski
Concept: Post war reconstruction of communist era building.
Objectives: Urban issues and attitudes of post war reconstruction.
Hardware: Dell PC
Software: AutoCAD, 3D Studio MAX, Photoshop
Category: Architecture

John Murphy	Senior
Matthew Wolfe	Senior

Title: River Vale Redevelopment: Community Center
Professor: Glenn Goldman
Concept: Design of a new community center including indoor meeting spaces and athletic facilities (gymnasium and swimming pool)
Objectives: (1) Provide an opportunity to work with real clients (Mayor of River Vale and community representatives) on a building type they are likely to encounter when they become practicing professionals and (2) assist a local community in developing visionary plans for redevelopment in order to improve quality of life in the township.
Hardware: Dell PC
Software: AutoCAD, 3DStudio MAX, PhotoShop
Category: Architecture

Chris Cosenza	Senior

Title: River Vale Redevelopment: Public Safety Complex
Professor: Glenn Goldman
Concept: Design a new public safety complex (police and fire department facilities) on a very narrow lot owned by the township.
Objectives: (1) To provide an opportunity to work with real clients (Mayor of River Vale and representatives from police and fire departments) on a complex building type they are likely to encounter when they become practicing professionals and (2) assist a local community in developing visionary plans for redevelopment in order to improve public services in the municipality.
Hardware: Dell PC
Software: AutoCAD, 3D Studio MAX, PhotoShop
Category: Architecture

Christiano Pereira	5th year
Elliot Glassman	4th year
Baila Ehrenberg	4th year
Matthew Wolfe	4th year
Raymond Chow	Freshman

Title: Uffizzi Gallery
Professor: Stephen Zdepski
Concept: An addition to the Uffizzi Gallery
Objectives: The use of multiple media to investigate the three design principles of significance materiality,orderwhich transcend style,fashion, or self-expression.
Hardware: PC
Software: 3D Studio MAX, Architectural Desktop
Category: Architecture

Jonathan McCann	Senior
Chris Booth	Senior
Elliot Glassman	Senior
Hector Camps	Senior

Savannah College of Art and Design

Title: Skoffee
Professor: Lucilla Hoshor
Concept: A new product changes peoples lives.
Objectives: Production experience, story writing, group collaboration.
Software: Maya, Animo, After Effects, Premiere, Flipbook, Pro Tools and 3D Studio MAX
Category: Animation GROUP Project

Eric Jay Cerda	Senior
Stefani Jill Kaufman	Senior
Jorge Martin	Junior
Changsoo Eun	Senior
Ryan Carl Gunther	Senior
Brian Ladouceur	Senior
Julie Lynne Herron	Senior
Annette Perin	Senior
Ramanda Kamarga	Senior
Adam Hikel	Senior
Sean Danyi	Junior
Crystal Hogan	Junior

Title: The Dance of the Phoenix in China Blue
Prof: Sue Anne Fu
Concept: Experimental 3D animation capturing China's cultural heritage through dance.
Objectives: Graduate level thesis project exploring 3D animation and modeling techniques.
Hardware: Mac
Software: Maya, 3D Studio MAX, PhotoShop, AffterEffects, Premiere, Sound Forge.
Category: Animation

Wei Ti Chen	Senior •••

Title: "Bangkok" A College City
Professor: Su Anne Fu
Concept: A hybrid of western and Thai culture
Objectives: To explore cultural issues using experimental animation.
Hardware: Mac
Software: AffterEffects, Illustrator, Photoshop, 3D Studio MAX
Category: Animation

Tanaponn Kulsedzeranee	Senior

South Dakota State University

Title: The Living Poster
Professor: Tim Steele
Concept: Students were required to take a 2D poster and reinterpret it using motion.
Objectives: Apply basic animation principles and engage in storytelling.
Hardware: Apple Macintosh
Software: Flash
Category: Animation

Adam Hegge	Senior	*Family Time*
Angela Dather	Junior	*Road Trip*
Chad Herrboldt	Junior	*Strech*
Gerry Shaw	Junior	*Puppy Love*
Jason Kuhl	Junior	*Floating Entanglement*
Joss Rossman	Junior	*Night- Writer*
Stacy Tellekson	Junior	*One Body*
Tracy Turner	Senior	*Mustang*

State University of New York at Fredonia

Title: Self Portrait
Professor: Liz Lee
Concept: To create a portrait of yourself that conveys a sense of who you are beyond the information that would be contained in a traditional photographic image.
Objectives: The objective is to fabricate an image in the CPU, to create artificial realities or situations, with personal content and meaning.
Hardware: Mac G3
Software: Adobe Illustrator, Photoshop
Category: Fine Art

AngelaOcchino	Junior
Jennifer Martin	Junior
Robert Savino	Junior
Kyle Morrissey	Junior
Keith Johnson	Junior
Sara Siegel	Senior
Cory Wilson	Junior

Universita IUAV di Venezia

Title: Laguna Memo
Professor: Polistina Alessandro
Concept: Computer animation for industrial design and ambient
Objectives: The teams allowed the student to gain experience in computer graphics and in cyber design.
Software: MAYA, Premiere, Photoshop
Category: Gaphic Design

Third year Students:
Masin Matteo
Marin Cecilia
Cecconi Cristiano
Cecchelero Lisa
Bacelle Matteo
Scantamburio Andrea
Mosconi Agnese
Morandin Cristina
Burato Francesca
Cettina Fabrizio
Quaresimin Stefano

University of Northern Colorado

Title: Books
Prof. Anna Ursyn
Software: Adobe Photoshop and Illustrator
Category: Graphic Design

John Pechacek	Senior	*Books Poster*
Jefferson Lee	Senior	*Librarian*
Pat Mapes	Junior	*International Week Poster*

Title: Habitat
Software: Adobe Photoshop, Illustrator,3D Studio Max, Painter
Concept: Based on a 3D model, create an environment.
Objectives: Create interaction between selected animal and their habitat.
Category: Fine Art

Michael Martinez	Senior	*Squishy*

Title: Meaning
Software: Adobe Illustrator
Concept: To change the meaning of the object.
Objectives: Examine the characteristics of a functional object and create a transition to different environment/object.
Category: Graphics

Steve Smart	Junior	*Context*

Title: Unification
Software: Adobe Photoshop, Illustrator,3D Studio Max, Painter
Concept: Projects for SPACE 2004
Objectives: Message provided visually "Unification of What"
Category: Graphics

Breanna Noack	Junior	*Lovetronix*
Brian Phelps	Senior	*Unification*
John Wilson		*Body Cells*
Anna Melkumian	Junior	*Unification*

University of Southern California
School of Fine Arts

Title: Independent Study
Profesor: Marientina Gotsis
Concept: Mock-ups/proposals for galleries installations
Objectives: Provide student with another medium for concept prototyping.
Hardware: Apple G4/G5
Software: Maya, Final Cut Pro, PhotoShop
Category: Fine Art

Doyle Trankina	Senior	*Mecanized Art*
Dante Fabiero	Junior	*Meme*
Geoffrey Nahashon	Senior	*The Gun*
Mayra Diaz	Junior	*The Cycle*
Casey Norman	Senior	*Urban Growth*

Call for Submissions 2005

The ACM SIGGRAPH Education Committee (ASEC) is sponsoring the SPACE-TIME student competition. The juried competition in print, linear animation and interactivity provides an excellent opportunity for students working in computer based media to exhibit their creative work nationally and internationally. It is open to all students currently attending elementary or secondary schools, colleges or universities. We encourage professors and teachers to have their students enter this prestigious competition. Selected projects will be on exhibit in Los Angeles, California at SIGGRAPH 2005. Winning entries will also tour nationally and internationally for approximately one year with the traveling show conducted by the ACM SIGGRAPH Education Committee. Selected projects or project segments from the entries may be included on the ACM SIGGRAPH Education Committee web site and in promotional materials distributed at the conference. The first place print winner in each competition will receive one student conference passport to the SIGGRAPH Conference.

General Rules of the Competition

- All entries must have been created while the student was currently attending a school program (work completed last year is also acceptable).

- These are juried shows. Entries will be judged on the basis of content, design, originality, technical excellence, and artistic merit. Preference will be given to submissions that push the limits of the technology available or involve combinations of technologies.

- Each student may enter one project per presentation style.

- Submitted media will not be returned.

- Entries will not be considered without a completed entry form.

- Illegible and incomplete forms will not be considered or reviewed.

- Nothing on the entry form is optional. Be sure that you fill out the form completely.

- You must have written authorization for any copyrighted sound or imagery used in the work.

Submissions

ALL ENTRIES MUST BE RECEIVED BY MAY 1ˢᵗ
Official form is located at:

http://www.siggraph.org/education/conferences/S2005/cfp/SPACE-TIME.htm

Division of Presentation Style:
Print

- Following the theme is required for print entries.

- All artwork must include the text "SIGGRAPH 2005 and "Los Angeles, CA" (California can also be spelled out).

- Image size is 11" x 17" at 200 ppi in a PSD, TIF, or PDF format.

- The original file must be accompanied with a JPEG file 388x600 at 72 ppi.

Submit print entries to:
Michael J. Mehall,
Schoolcraft College
Computer Graphics Technology
18600 Haggerty Road
Livonia, MI 48152-2696
mmehall@schoolcraft.edu

Linear Animation
Projects will be accepted in the following categories:
- fine art/experimental animation
- story-telling/narrative animation
- character animation
- visual effects animation
- animation for interactive or education
- animation for games

Entries should not exceed five minutes in length.
- It is preferred the piece be submitted in completed form, though works in progress may be submitted so long as enough of the work is completed for evaluation and so long as a completed version will be ready for final submission by June 15th.

- Both individual and group projects are welcome.

- You must have written authorization for any copyrighted sound or imagery used in the work.

- Submissions are preferred in digital form (mpeg, quicktime, avi, etc.) on CD or DVD, though NTSC video tapes will be accepted. Submitted media will not be returned.

Submit animation entries to:
Marty Altman
Visual Language Laboratory
School of Film and Digital Media
University of Central Florida
P. O. Box 163121
Orlando, FL 32816-3121
email: altman@siggraph.org

Interactivity

- The submission must be interactive. People must be able to experience the project directly, individually or in small groups.

- It is preferred the piece be submitted in completed form, though works in progress may be submitted so long as enough of the work is completed for evaluation and so long as a completed version will be ready for final submission by June 15th.

- Submission must provide final archived version on CD, DVD or other media (Zip, Jaz or diskette). Submitted media must be labeled.

- Both individual and group projects are welcome.

- You must have written authorization for any copyrighted sound or imagery used in the work.

- You must include a listing of required plug-in components needed to view the site and/or preferred browser.

- Must include full credits.

Submit interactivity entries to:
  Stephen Wroble
  Schoolcraft College
  Computer Graphics Technology
  18600 Haggerty Road
  Livonia, MI 48152
  swroble@schoolcraft.edu

www.education.siggraph.org

SIGGRAPH2004