

HIGHLIGHTING FACULTY, STAFF, AND STUDENT SCHOLARSHIP

FALL 2007

# *Scholarship* @ R·I·T

R·I·T LIBRARIES

## Live Virtual Theatre

### B. Thomas Golisano College of Computing & Information Sciences

Imagine a live theatrical performance. However, imagine, rather than having to go out to a physical theatre, you can be at home and experience the action in a virtual world: the actors are all avatars, the sets and lights are virtual; and the show is viewed on a computer screen and performed live by people located all around the globe.

Is it possible to enable this kind of theatrical experience, and if so, how would the experience compare to a show on a real stage? These are some of the questions that are being explored by Joe Geigel (Computer Science) and Marla Schweppe (Design) as part of the Virtual Theatre project,

a collaborative effort between the department of Computer Science (GCCIS) and the School of Design (CIAS).

Funded by a three year grant from the National Science Foundation, Joe and Marla, along with their

colleagues, Walter Wolf (Computer Science), and Tina Chapman DaCosta (NSSA), will set out to create theatre in 3D virtual space, where actors, crew, and audience share and participate in a single theatrical experience over the Internet. A variety of virtual reality devices are employed in controlling the actors, props, and lighting on the virtual stage, including a full body motion capture system.

In addition to the research aspects of the project, Virtual Theatre serves as a means of exploring collaborative education. The project has been incorporated into the existing curriculum, allowing for firsthand student involvement in the required research of the project. Students from both Computer Science and Design create the technical and aesthetic elements necessary to realize the performance. This classroom experience introduces students to the kind of interaction between artists and technologists that is essential in many industries involving graphics and electronic entertainment (e.g. visualization, special effects, computer animation, and games).

More information on the Virtual Theatre project, along with a list of recent publications, can be found at <http://www.cs.rit.edu/~jmg/vtheatre.html>.

Joe Geigel / Computer Science



PHOTO BY WALTER WOLF

Tina Chapman Da Costa wears a full body motion capture suit preparing to control the motions of an actor on the virtual stage.

## Sharing Expertise and Scholarship Worldwide

### National Technical Institute for the Deaf

The Postsecondary Education Network-International (PEN-International), a partnership of colleges and universities worldwide, was created in 2001. PEN-International improves and expands postsecondary education for deaf and hard-of-hearing individuals worldwide. PEN shares educational technology, conducts faculty development, and constructs state-of-the-art multimedia laboratories at partner institutions.

Since 2001, the PEN-International program has been funded by over \$8 million in grants from The Nippon Foundation of Japan. Currently, the network

includes sixteen partner and affiliate institutions from Japan, China, Russia, the Philippines, the Czech Republic, Thailand, Korea, Vietnam, and Hong Kong.

PEN-International designs and conducts workshops based on local needs of PEN partner institutions. After a partner university determines a specific need for customized training, PEN-International

collaborates with RIT faculty.

In March 2007, a delegation representing the Korea Employment Promotion Agency for the Disabled and the Korea Nazarene University visited NTID/RIT for a week of training. The workshops focused on instructional technology/design, classroom communication/access, and employment issues.

The goal was to provide the Korean delegation with sufficient background information and resources related to their particular interest in instructional technology and classroom communication so they can begin the process of implementing changes at their institutions.

Each participant was given an overview of various RIT/NTID techniques. Participants then accessed additional resources from special myCourses postings.

The evaluation of the workshops was positive. The group agreed to work on concepts presented, culminating in a continuation of training and lectures in Korea.

E. William Clymer / PEN-International



PHOTO BY E. WILLIAM CLYMER

Kathleen Darroch, Manager of the Liberal Arts Interpreting Team, conducts a workshop entitled, *Working With Interpreters in the Classroom*.