

Theatrical Collaboration over the Internet

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About me

- Assistant professor in Dept of CS at RIT
- Internet 2 rookie
- Email: jmg@cs.rit.edu
- My interest
 - Use of Internet 2 for distributed performance
- My project:
 - Virtual Theatre

Virtual Theatre

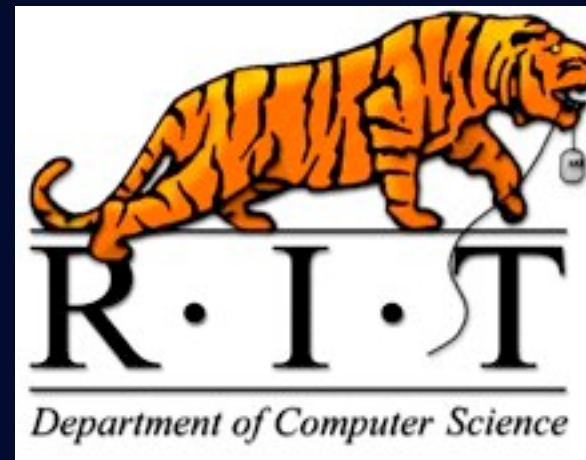
Integration of distributed virtual reality / gaming technologies into the theatrical storytelling process.

- Our experiments in theatrical storytelling
 - Live...action takes place in a distributed virtual space
 - Performers / crew control from a physical space
 - Active Audience Participation

Spring 2004 - present

Virtual Theatre

- Art and Technology Collaboration



- ✓ Visuals
- ✓ Lighting / Staging

- ✓ Technology



Virtual Theatre

- Mission
 - Create a distributed, shared, theatrical experience
- Approach
 - Use a distributed virtual world in which to perform
- Implementation
 - Adapt a gaming engine for theatrical purposes
 - Use Access Grid for “behind the scenes” communication

System Architecture



participant



VIRTUAL THEATRE LAYER

Gaming Engine

Graphics API

Networking API

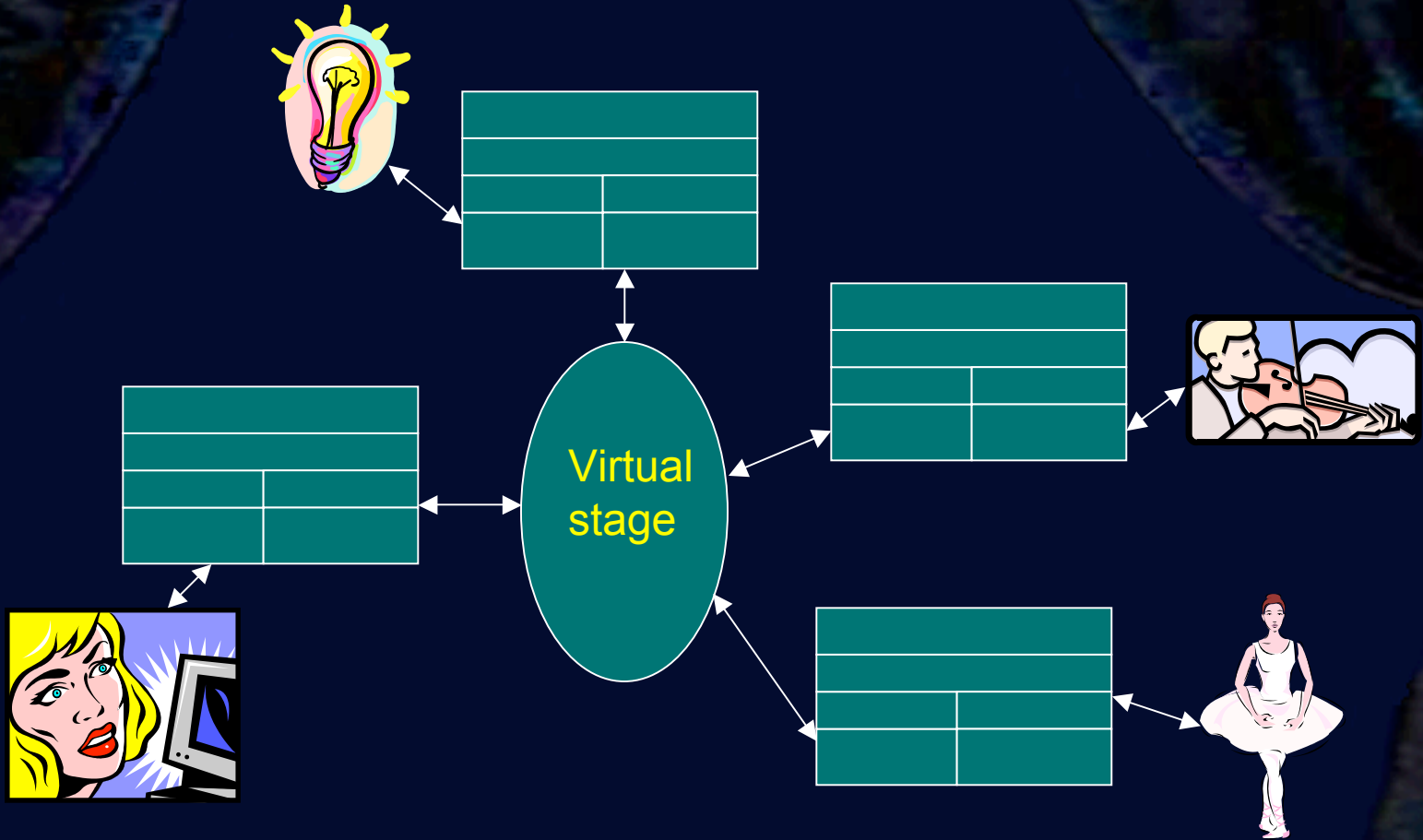
Graphics
Hardware

Network
Hardware

To display ←

↘ To network

Virtual Theatre



Virtual Theatre and Collaboration

- Collaboration on two levels
 - Performance
 - By its very nature, theatre is a collaborative art.
 - Different people in different places sharing in the same performance
 - Process
 - Successful collaboration between artists and technologists.

Virtual Theatre

- Goals:
 - Artistic
 - Create engaging distributed theatre
 - Technical
 - Create technologies that enable engaging distributed theatre.
 - Education
 - Create curriculum that fosters collaboration between art and tech.

Virtual Theatre at RIT

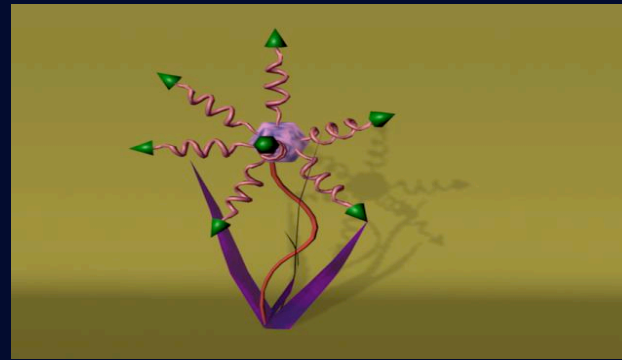
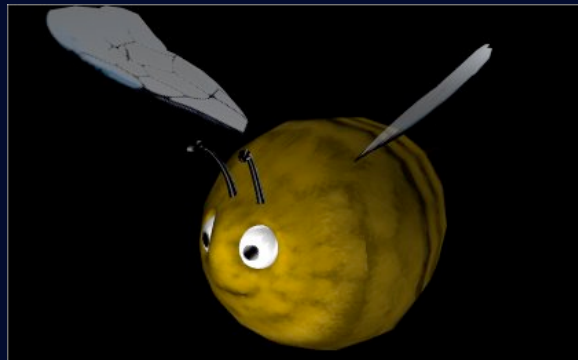
- Offering companion courses annually since spring 2004:
 - Design
 - Create models, sets, avatars, animations, lighting.
 - CS
 - Create technical infrastructure for performance.

What's the Buzz? (Spring 2004)



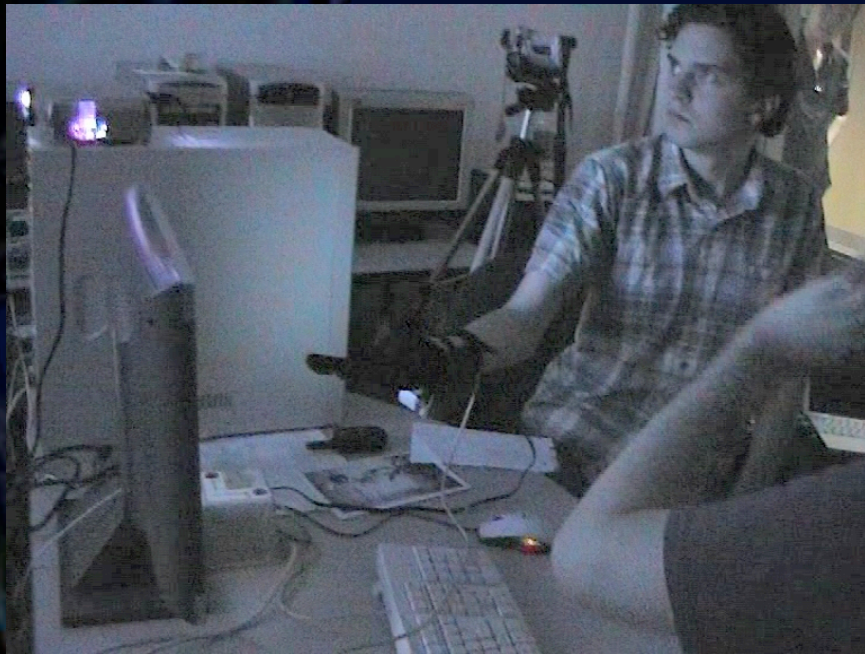
- Story
 - Inspired by *Duck Amuck*
 - Bees in search of nectar
 - Changing scenes and flowers
 - Flower vs. Bees
 - Improvisation

What's the Buzz? (Spring 2004)

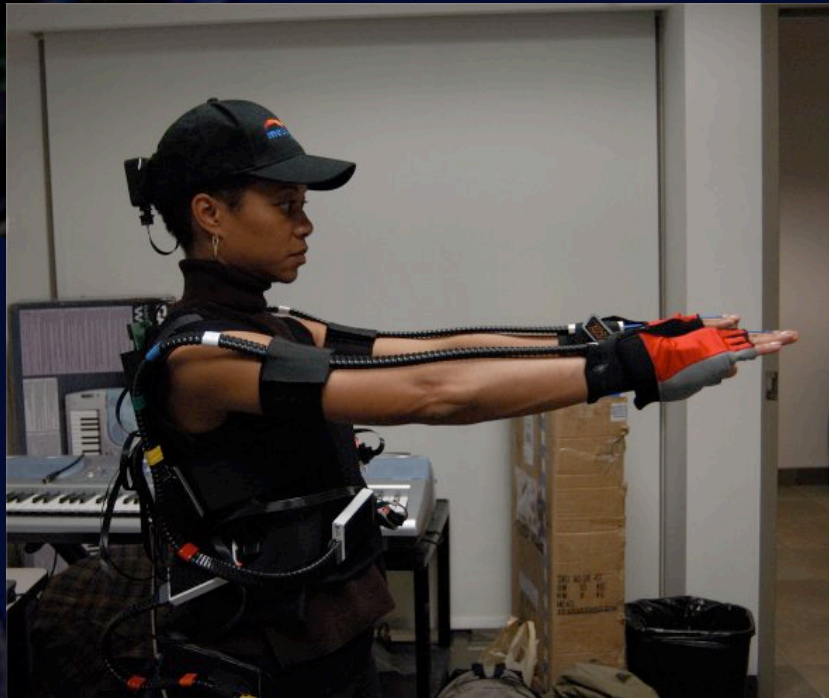


Characters

What's the Buzz? (Spring 2004)



Getting By (Spring 2005)



Future Plans

- Move from LAN to Internet
- Create an infrastructure for presentation of live performance in a virtual space over the internet
 - Theatrical interface
 - General yet robust
 - Explore use of access grid in the process.

Thanks

- Questions?
- Contact: jmg@cs.rit.edu