Bringing Game Research to the Real World

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What are we doing?
- Empirical research and technology prototyping of Computer Games and Virtual Worlds that support challenge problems in science, health care, art, technology and defense studies.

Why are we doing this?
- Computer games are both *technology* and *new media*
  – An opportunity area for research and innovation in playful socio-technical systems
- Enable immersive and transformative experiences that facilitate learning through R&D, play and failure experiences
- Engage new students and emerging scholars
Some game projects of interest

- Science learning games for informal science education at regional science museums
- Game-based semiconductor fabrication operations training simulator
- Virtual worlds for space science on a sphere
- Game-based decentralized command and control training simulator
- Experimental games for business, cultural critique, art and technology
- Facilitating local game development community
- New game research projects in progress
Web-based science learning games for informal science education for K-6 students and families: *DinoQuest Online*

Semiconductor/nanotechnology fabrication operations and diagnostics training game

Planetary science data visualization and “spherecasting” support: *NOAA Science on a Sphere* installation in *Opensim VW* platform

Supporting exploration of planets, earth systems (ocean, climate) and near-earth objects (space debris, small satellites, near-earth asteroids)
2D, side-scrolling, *World of Warcraft* inspired, role-playing game parody and CGVW development/modding kit

Aoedipus.net
Game-based VW incorporating real-world news feeds and geopolitically located Twitter feeds
Game-based VW simulator you can actually drive in physical world! -- OutRun @ UCI

http://www.conceptlab.com/outrun
Community development concept: Supporting UCI video game developers club projects (sample)
Community development concept: IEEE Intercollegiate Computer Game Development Showcase

Intercollegiate Game Showcase 2012

**Game**
Programming skills on Fire

Venue: Chapman University, Folino Theater
Saturday April 28, 2012

Compete in our Game Contest, Win Prizes, Earn Achievements & Fine Tune Your Skills

Do You Have What It Takes?

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**Game Event**
details about game event

Venue: Chapman University, Folino Theater, Saturday, April 28. Setup starts at 1:00. Main event starts at 2:00 and ends at 4:00...

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**Contest Parameters**
know more about contest

All platforms are acceptable. Submissions will be judged based on originality, creativity and execution – and on whether they are fun to play...

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**Submission Guidelines**
our submission rules etc.

Finalists will be selected based on YouTube videos 3 to 5 minutes long. These should demonstrate gameplay and key visuals and should include the name of the game...

READ MORE
New Project: Informal game-based music learning environment for San Francisco Symphony
New project: develop reusable framework for developing “science mission games”

Sample game activity: Capture a near-earth asteroid
The Future of Research in Computer Games and Virtual Worlds
Faculty

Post-Doctoral Scholars
– Garnet Hertz (UCI LUCI)

Research Staff
– Craig Brown (SMU), Yuzo Kanomata (VDIO), Kari Nies (HRI/ISR), Alex Szeto (ISR)
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– UCI Video Game Developers Club
– IEEE GameSIG

– No review, approval, or endorsement implied.