Serious games: SecondLife

Paul Bourke [WASP (UWA), iVEC]

Jay Jay Jegathesan [Physics (UWA)]

Second Life File Edit Window 00:45:34 (Charged) Fri 10:38 AM

Second Life

File Edit View World Tools Help University of WA 103, 41, 24 (PG) - The University of Western Australia, UWA 7:38 PM PDT L$3,531 Search

Colonel Gryff Richard
Troy McLuhan
idgaf Blvd Ho
Moth Rexen
Curtin Student Charis McKeenan
diGriz Kenzo
Juanita Grizot
Member Dragonmage Bogan

Communicate

Local Chat

Gestures Show Muted Text

[19:33] Chrome Underwood: ok
[19:33] Dragonmage Bogan: currently john goldsmith speaking
[19:33] Dragonmage Bogan: he is the astro photographer
[19:33] Ourania Fizgig shouts: Join us by the screen! John Goldsmith is speaking about his inspiration of astronomy and his interest in photography
[19:33] Ourania Fizgig shouts: His exhibit is in the building.
[19:34] Juanita Grizot: okay
[19:36] IM: Ourania Fizgig: If you hit Ctrl-Alt-D
[19:36] IM: Ourania Fizgig: you get Advanced menu
[19:36] IM: Ourania Fizgig: and you can choose Quiet Snapshots to Disk
[19:36] IM: Ourania Fizgig: B/c your camera noise is disrupting the audio
[19:37] Moth Rexen:
[19:37] joanne Kimono:
☆*¨¨¨*:•Because!!!•:*¨¨¨*☆
[19:37] Blvd Ho: hey whats up hun
[19:37] Moth Rexen: not much, there is a live stream if you hit play
[19:37] Ourania Fizgig: PLease keep your audio animations off, thanks!
[19:37] Blvd Ho: kk
[19:37] Ourania Fizgig: THere is live media on the left screen, please enable your Streaming Media
[19:37] joanne Kimono: oops

Say

Contacts Local Chat Ourania Fizgig Moth Rexen

Name
Ourania Fizgig
Moth Rexen
Dragonmage Bogan
Tranguloid Trefoil
Charis McKeenan
Georgianna Blackburn
Troy McLuhan
Blvd Ho
Juanita Grizot
florenze Kerensky
Brenda Collinson
Chrome Underwood
Gryff Richard
Jadyn Firehawk
Louren Fiertze
diGriz Kenzo
joanne Kimono
Patio Plasma
Xerxes Druart
Lnn Nishi
Hawking Quan
Jayjay Zane
SiFan Shan

Mute Text

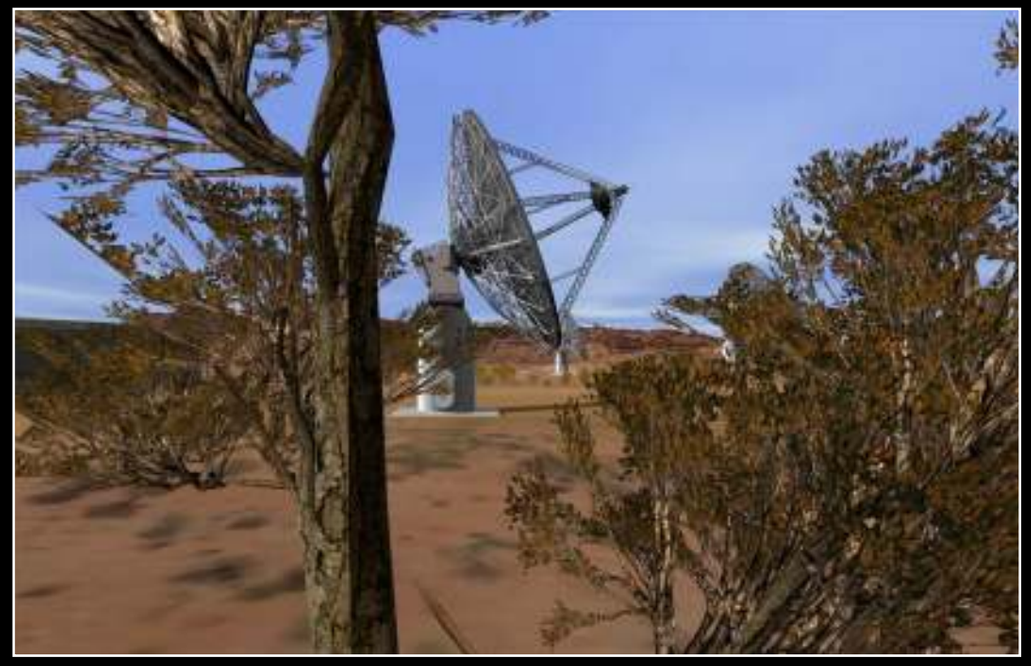
Communicate Fly Snapshot Search Build Map Mini-Map Inventory Talk

Contents

- Serious games: Leveraging advances and applications in the gaming industry.
- Video conferencing and collaboration (within a 3D environment).
- SecondLife: an overview. What is it, what can it do, how does it work?
- Further discussion of features and capabilities.
- Live demonstration.
- Introduction to the UWA regions and the opportunities they present.
- SecondLife and UWA, presented by Jay Jay Jegathesan.
- Questions.
- Break for further questions and demonstrations for those who have particular interests.

Serious games

- Underlying questions is whether we can leverage the large industry investment in gaming for serious activities.
- There is additionally a large gaming user base who are comfortable residing within 3D worlds, familiar with user interfaces, etc.
- Existing examples by myself include the ASKAP "walkabout" application that uses the Unity Game engine.
- More recently the Blender game engine and an application to measure individual driving performance after different levels of alcohol consumption.
- Not a new idea, gaming engines are increasingly being employed for simulators, training, and for presenting engaging educational content.
- Multiplayer games introduce interactions between players ... opportunities for collaboration and a sense of community between participants.

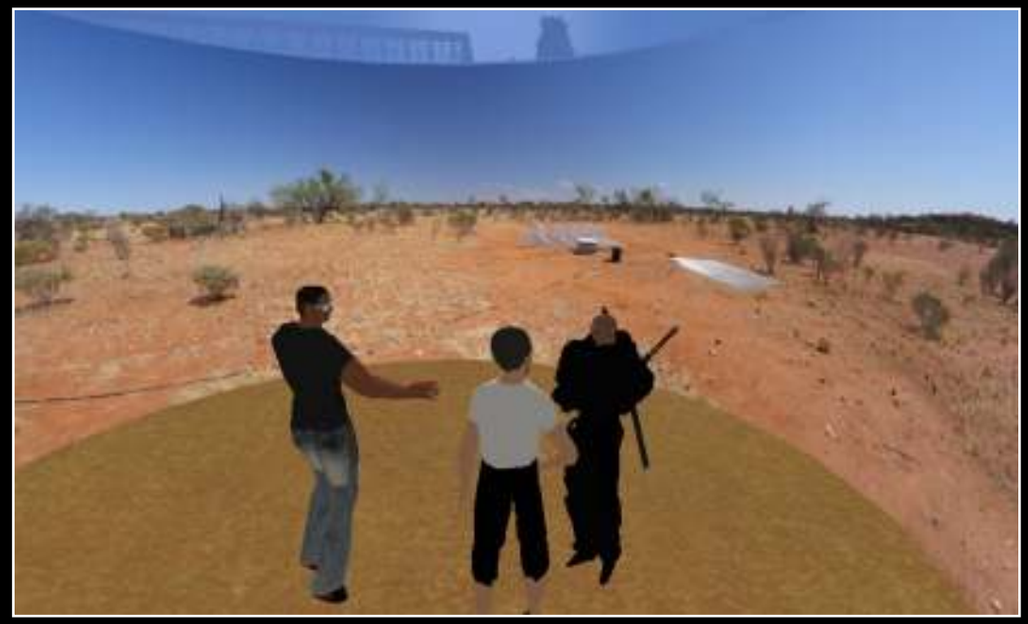


Unity 3D game engine

Blender game engine

Video conferencing and collaboration

- Wide range of tools for video conferencing: one way streaming video and "peer to peer".
- Technologies such as the access grid (WASP) provide a highly scalable system that can support large numbers of sites, each with possibly multiple cameras and participants.
- While some may offer shared applications (mostly just screen sharing) or shared whiteboards, there are no standard solutions that place the participants within a shared 3D world.
- SecondLife offers some interesting possibilities for collaboration between remote researchers.
- This is a particular interest of mine, providing a collaborative space where individuals can meet and explore 3D datasets or other visualisations.



Discussion of MRO site

Inside a virtual molecule

SecondLife: An overview

- 3D virtual world, managed by Linden Labs.
- Occupied simultaneously by multiple people.
- Each person is represented by an avatar.
- Participants can build in 3D.
- Supports instant messaging, text chat, voice chat, and gestures.
- Supports audio and video streaming.
- Programming language is called “linden scripting language” (LSL).
- Cross platform software. (Mac and MSWindows).
- Free software and free to participate.
- Has it’s own internal economy, Linden dollars with a floating exchange rate to US dollars.

ASKAP and MRO

Starlight exhibition opening

Further discussion of features and capabilities.

- Persistence of 3D assets by saving to personal inventory or through the purchase of land.
- Regions can be open to anyone or restricted to members.
- Objects have a comprehensive set of ownership privileges. They can be owned personally by the creator, given to selected individuals, or made freely available to anyone.
- The programming (scripting) language means the SL experience can be extended in many ways.
- Objects in SL need not be static, LSL allows interactions limited only by the programmers imagination.
- Moderately compelling 3D graphics that makes efficient use of the available graphics hardware.
- Supports spatial audio.
- The software has been designed to be used by people with a wide range of computer skills, I suggest it is one of the easiest 3D interfaces.
- There are plenty of restrictions but most are there for good reasons ... in particular, to give an acceptable experience to a wide range of users and hardware capabilities.

Demonstration

- Modelling
  - Creating and editing geometric primitives.
  - Applying textures.

- Transportation
  - Walking, running, flying.
  - Teleporting.

- Communication
  - Text chat., instant messaging.
  - Voice.
  - Gestures.
  - Streaming media.
  - Links to web pages.

- There is no better way to explore the possibilities than to try it out for yourself.

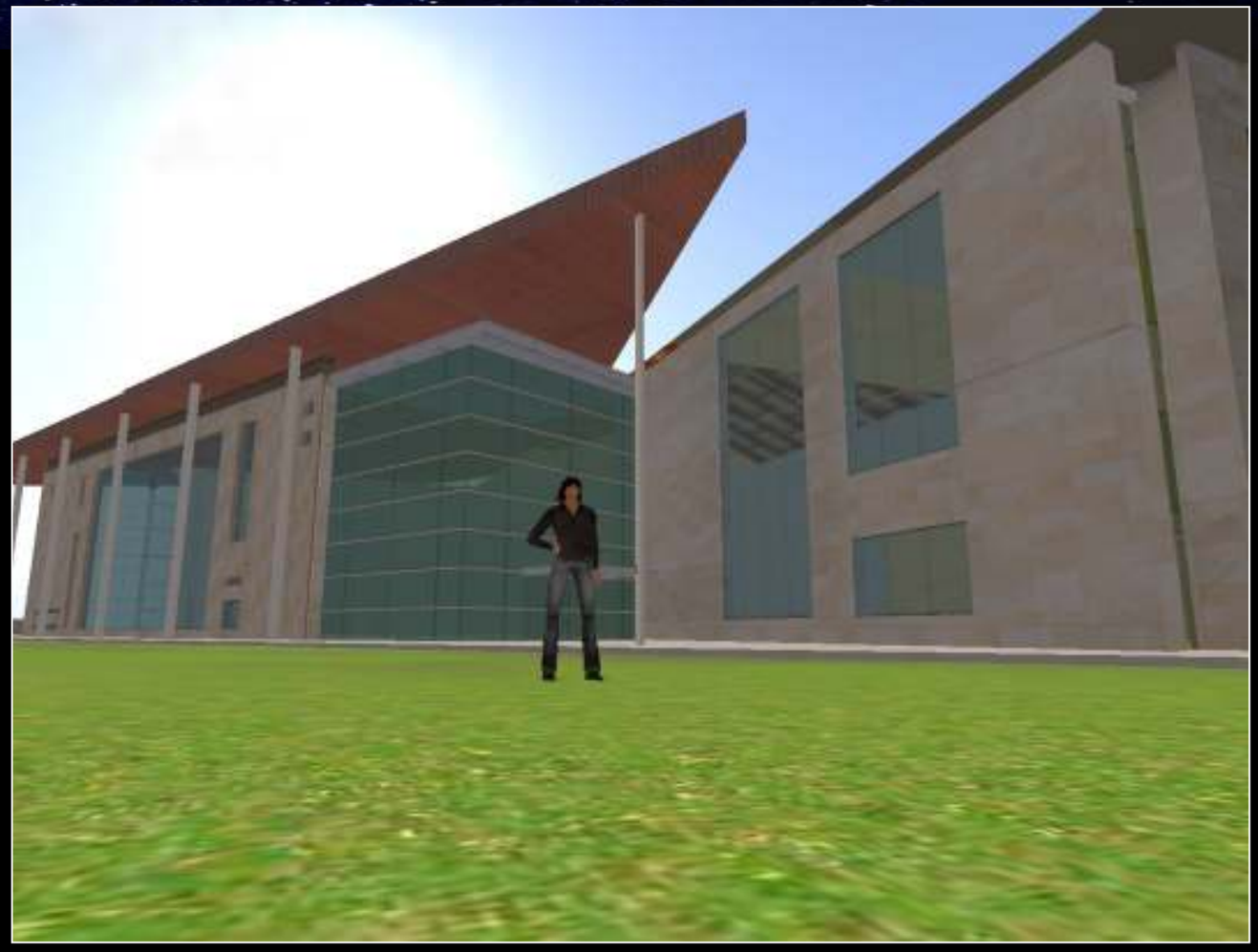
- The question to ask is “How can I use this medium that will give benefits over web pages, movies, text, DVDs, etc?”

SecondLife and UWA

- UWA has acquired 2 regions, this allows us to have a permanent presence that anyone can teleport to.
- One region is owned by WASP/iVEC, the other adjacent region by Physics, is managed by Jay Jay Jegathesan.
- Funds have been sourced to build (mostly student contractors) a UWA campus model on these regions.
- The WASP region has been acquired on the basis of allowing exploration of the medium by UWA researchers. Certain types of exploration can only be conducted by owning land.
- There is additionally now a body of expertise among participating staff as well as a body of competent students who can contribute to projects on a contract basis.
- Jay Jay Jegathesan will discuss his involvement, experiences, and the campus model.

STARLIGHT
Celestial Visions on Second Life

Golden Halostar, Tranguloid Trefoil, Jay Jay Zifanwe, Bogan Dragonmage, Mrs Brandi, Minny Werefox, The Slingshot, Bradley Dorchester, MichaelAnthony Wirefly, Porcoespino Sleydon, Lordyen Towton, Gryff Richard



The UWA Google Earth Project

- Team UWA took top spot in the Google Earth 'Build your Campus in 3D' Competition.
- Beat out Eastern States Universities. 56 buildings vs 7 buildings (2nd place). Quality was a major factor.

STARLIGHT: Celestial Visions on Second Life

The UWA Second Life Project

Second Life is a World-wide, world renowned 3D Virtual World created by Linden Labs in the USA.

- This allows us to rebuild our campus in all her glory, the buildings, trees, peacocks, ducks, gardens and grounds.

- For alumni, for prospective students, for regional & international marketing, for current students undergrad & postgrad, for UWA educators, blended learning & e-learning specialists.

- Second life is at stage like the early days of television. It (or 3D virtual reality) is the future.

The people who have made this happen

- Professor Alan Robson
- Dr Alexandra Ludewig, Associate Dean Faculty of Arts, Humanities & Social Sciences
- Professor Karen Haines, WASP
- Dr David Savat, Chair, Communication Studies
- Frank Roberts, University Architect, OFM
- Professor Ted Snell, Director, Cultural Precinct
- Winthrop Professor George Stewart, Dean, Faculty of Life and Physical Sciences
- Professor Ian McArthur, Head of School, Physics
- Greg Salotti, Director, Systemic Pty Ltd
- Associate Professor Mark Pegrum, Graduate School of Education
- Associate Professor Wade Halvorson, Marketing, School of Business
- Adrienne J. Gauthier, Instructional Technology Specialist, University of Arizona

Questions?