Disney Imagineering VR Studio

- Disney Imagineering designs the most complex and innovative rides for the Disney theme parks.
- In 1998 Disney opened DisneyQuest in Florida, the world’s largest arcade for virtual rides and virtual reality entertainment.
- VR Studio within Disney Imagineering developed the VR technology.

Panda 3D in the Beginning

- The virtual rides of DisneyQuest were produced using a new graphics engine developed by Imagineering, called Panda 3D.
- The first VR ride they developed using Panda 3D was Aladdin’s Flying Carpet (1998).
Panda 3D Engine

- Panda 3D is a 3D engine “and more”.
- The engine is written in C++.
- It is easy to load models and characters into the engine (there are many converters available).
- Originally being a commercial engine, there are many tools with Panda 3D, e.g. for supporting content preparation and for profiling.
- The engine already contains modules for more than graphics, including sound and music, as well as interfaces to physics engines.

Panda 3D and Python

- At run-time the engine interprets a program written using the Python scripting language.
- In a basic sense, the script coordinates the application: Sets up the user interface, feeds data to the engine and defines the interactivity.
- However, most parts of the Panda 3D engine can be accessed through a Python interface.

Panda 3D is Free

- In 2002 Imagineering released the Panda 3D code to the public. Now under a modified BSD license.
- The code continues to be developed at Imagineering and at the CMU Entertainment Technology Center where it is used for teaching the development of interactive digital entertainment.
Panda 3D in Games

• Panda 3D is still used at Disney to develop games, including Toon Town Online (the first MMO for kids)...

...and most recently “Pirates of the Caribbean Online”.

...and now "Pirates of the Caribbean Online"...
Panda 3D at RU

- At Reykjavik University we use Panda 3D both for teaching and research.
- Proven to be very straight-forward to use, but also very powerful.

Virtual CADIA (Pálmi og Páll)

Research Project:
CADIA Populus

Previous VE Course Assignments [Spring 2007]

Nutshell and Freya
Panda 3D on the Web

http://www.panda3d.org