

The PARSEC Project

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Overview

- Introduction
- Brief history
- Portability
- State
- Goals
- Real-Time Demo
- Conclusion

What's Parsec anyway?

- 3-D space fight game, multiplayer only
- competition with human players, no AI
- DOS, Win32, and MacOS versions
- non-commercial project (will be freely available for download)
- goal is to learn as much as possible, achieve competitive quality, and still have a lot of fun along the way

Project History

- first released for the CG2&3 lab (1996)
software rendering in 640x480, 256 colors
- added particle system
- added command console
- restructured into subsystems
- added hardware-accelerated rendering
on Voodoo Graphics (3Dfx Interactive)
- RGB textures instead of palettized ones

Why Parsec is "portable"

- Code-base highly modular
- Abstract subsystems
 - ...isolate system-dependencies
 - ...have uniform interface
 - ...may be changed on-the-fly
- Audio, Input, Networking, System, Video
- Drawing (2-D gfx), Rendering (3-D gfx)

Current Work and Goals

- TCP/IP networking subsystem
- Internet game play
- Smooth levels of detail
- OpenGL port
- Linux/Glide, Linux/Mesa port
- SGI IRIX port

Real-Time Demonstration

- we used Parsec's demo recording feature
- four players were recorded in several network sessions
- local player recorded in high resolution
- remote players recorded via their sent packets which can be played back as though they had just arrived

Concluding Remarks

if you would like to know more about the Parsec project...

... ask me

... visit our webpage on

<http://www.cg.tuwien.ac.at/~msh/parsec.html>