

intelligent multimedia*

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ABSTRACT

In this presentation we will outline the requirements for a software platform supporting *intelligent multimedia*. These requirements encompass computational concerns as well as presentation facilities, providing a suitably rich environment for applications deploying rich media.

We will then propose a platform based on the distributed logic programming language DLP and X3D, the extensible Web3D format. A number of case studies will be described, illustrating the potential of the DLP+X3D platform, including a multi-user game with autonomous players, avatars commenting on rich media presentations, and a gesture scripting language for humanoids based on dynamic logic.

In conclusion, we will discuss related work and review the evaluation criteria that pertain to the deployment of agent-based rich media 3D environments.

structure

- mission – VR interfaces
- background and motivation – research
- platform – DLP+X3D
- case studies – soccer, presentation VR, STEP
- research issues – agents and VR in DLP
- conclusions and future research – XML

1. MISSION

mission

Our goal is to study aspects of the deployment and architecture of virtual environments as an interface to (intelligent) multimedia information systems ...

our focus is (quite) technological

<http://www.cs.vu.nl/~eliens/research> ...

2. BACKGROUND

DejaVU

- object-orientation – POOSD 2nd
- structured hypermedia – van Ossenbruggen (CWI)
- visualization – Schönhage (ASZ/OTI)
- HCI/(embedded logic) – ... van Welie

hush

...

publications

- Bringing music to the Web
- Animating the Web – an SGML-based approach
- Jamming (on) the Web
- 3D Gadgets for Business Process Visualization (Ballegooij)
- A taxonomy of Web agents (Huang,de Bra)
- Navigation by Query (van Ballegooij)
- Agent-based Virtual Communities (Huang)

3. PROJECTS

projects

- WASP – Web Agent Support Program (NWO)
- RIF – Retrieval of Information in Virtual Worlds (NWO)
- AVID — Agents and Virtual environments in DLP

perspectives

- education – intelligent multimedia
- research – architecture, 3D GUI, agents
- collaboration – AI (VU), CWI
- student projects – VU Campus, Out of the Dark

4. REFERENCES