

Collaborative VR

Challenge:

- Many people working on the same physical model (CAD/VR)
- Inaccuracies evolve from not always having the latest model
- Communication for concurrent work

New application areas

- Forest machinery
 - Operation
 - Maintenance

Training challenges

- Willingness and motivation
 - Higher in young people
- Tool must be beneficial
- Marketing of the tool to the users is vital
 - Marketing setting important
- Easy introduction: levels
- Keeping things straight

Design

- Seeing all views and shapes
 - Not "cheating" by selecting the nicest views only
 - Work like if you had the same model in front of you on the table (AR setting).
- 3D visualisation in the early stage planning is crucial
 - General design
 - Impact on the environment
- Challenge:
 - Conversion from CAD to VRML/X(j)3D
 - Limitations v/s design "freedom".
 - Error information and perception.

Training Challenges

- Tracking in AR with high accuracy
- Motivation depends on realism/sense of presence
- Graphical part vs. Technical part

- Core must be good first, visualisation has to build on this
- Abstraction level has to be selected carefully
- Intelligent choices of parameters

Training tools in new use

- Example from South Africa:
 - Evaluation of potential workers by how they perform in the simulator
- Evaluation of collaboration also??