

EU-India Economic Cross Cultural Programme





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Web3D Technologies



- Ianguages, protocols, software tools that allow one to build 3D Virtual Environments and 3D objects that can be delivered through the Web
- a combination of interactive 3D graphics, Virtual Reality and Web technologies
- first efforts in 1994, now:
 - many available technologies for 3D on the Web, including ISO standards
 - annual ACM Web3D Symposium (held since 1996)
 - increasing usage in many application areas





Our main projects



- 3D Virtual Stores
- Virtual Prototyping
- Mobile 3D Guides
- Virtual Training
- Virtual Humanoids







3D Virtual Stores



- most e-commerce sites use 2D interfaces
- 3D virtual stores can be more familiar, easy to use and fun for nonexpert users
- our goal: find guidelines to design 3D virtual stores







Virtual Prototyping



- 3D allows to visualize industry CAD data for both early design evaluation and product visualization
- Example: textile industry, project in cooperation with









Mobile 3D Guides



 goal: use 3D graphics in a PDA-based mobile tourist to provide an intuitive way to interact with information, e.g. ask for historical information on a building







Virtual Training



- 3D can provide more effective training applications, where the trainees learns from a virtual experience close to the real-one
- for example, trainees can learn hand-operated tasks related to assembling or disassembling mechanical items:
 - the system suggests the task to perform;
 - trainees can move their virtual hand and try to execute the task.







Virtual Humans



- Virtual humans can enhance an educational virtual environment by providing:
 - navigational and interaction guidance
 - emotional response (more involvement)
 - social dimension (the "persona effect")
 - non-verbal language for explanation and feedback (more immediate and inobtrusive)









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