INI-GraphicsNet

Join the new technology

Computer Graphics is one of the key technologies of a modern information and knowledge society. The INI-GraphicsNet develops market-oriented, state of the art technology to foster and to support the innovation process of enterprises as well as the social development. Numerous businesses use our know-how to implement sustainable products and services. We achieve this with, for example:

- 3D Interaction and Visualization
- Agent Technologies
- Animation
- Augmented Reality
- Computer Supported Cooperative Work (CSCW)
- Database Services
- Geometric Modeling / CAD-Model
- Graphical Information Systems (GIS), Facility Management
- GUI / Interaction Technology
- Image Analysis, Image Quality
- Imaging
- Internet- & Intranet-Solutions
- IT-based Learning and Training
- Medical Data / Image Processing
- Mobile Computing Technology
- Modeling and 3D-Reconstruction
- Multimedia and Hypermedia
- Multimedia User Interfaces
- Perceptual Computing
- Product Data Management
- Rendering
- Scientific Visualization
- Secure Image Communication
- Semantic Modeling
- System Integration
- Telecommunications
- Ubiquitous Computing
- Usability and Utility Engineering Technologies & Methods
- Virtual Prototyping
- Virtual Reality

Our expertise allows us to work on a multitude of industry-related topics which include, amongst others:

- eApplications
- eServices
- eBusiness
- Medical Information Technology
- IT Security and IT for the security in our society
- Visualization and Interaction in traffic technology and traffic telematics
- Ambient Intelligence
- Games and Edutainment
- Usability and Utility Engineering
- Software for the product and production development

Computer Graphics

Computer graphics is the **technology with which pictures, in the broadest sense of the word (synthetic graphics as well as grayscale and color images), are captured or generated, presented, manipulated, digitally processed in the appropriate form for the respective application and merged with other, nongraphical application data.** Computer graphics also includes the computer-supported integration and manipulation of these pictures with other kinds of data, such as audio, speech and video **(to create multimedia systems)** as well as corresponding advanced **dialog and interactive technologies**. Concepts which characterize the important topics of computer graphics are, to name a few, visualizing information, visual data mining, visual computing, Virtual Reality (VR), Augmented Reality (AR), interactive Internet services and secure image transmission and communication.

Contents