



INTERACTIVE AVATAR MAKEUP SIMULATION SYSTEM

Technology Overview

Interactive avatar makeup simulation system (IAM) utilizes realistic facial color reproduction technology based on color science to create a 3D facial avatar model identical to human face in reality, and to realize realistic virtual makeup capability implementing both of beauty and special makeup effects using virtual makeup tools. The system consists of the following functionalities.





3D Facial Scanning & Skin Analysis system

Core Technologies 199

- A portable scanning system
- Restoration of high quality 3D facial avatar
- Image capturing using various light sources
- Reproduction of face and makeup colors based on spectrum data
- Interface supporting real makeup environment
- Support databases including face, cosmetics and makeup tools
- Support automatic makeup to a new 3D facial model based on pre-built makeup template in style database
- Skin Analysis based on the 3D facial model
- **Application Area and Advantages**



Interactive avatar makeup simulation system based on color science

- Cosmetics companies
- Wedding companies
- **Education of Makeup**
- Performances such as musical, opera, etc.
- Easy-to-use high quality makeup simulation: create facial avatar with high resolution skin texture easily
- Error-free cosmetic purchase advisor: realistic facial color estimation & simulation
- Can be applied to clinical screening & diagnosis by providing 3D facial skin analysis