

Projects URL: <http://anglee.org/proj/>

Magic Brush (2005)

Instructor: Prof. Irfan Essa

Aims to assist people who don't have drawing expertise to share the beautiful pictures in their mind. This is achieved by letting users exploit existing style, color brush, pattern present in thousands of master pieces or photo. Issues including Non-Photorealistic Rendering, Texture synthesis, Color transfer, Segmentation.

Polyloop Smoothing (2005)

Instructor: Prof. Jarek Rossignac

Planar curves may contain undesired noises or details. The project explores the smoothing technique involving moving position of sample points along the curve. Naive techniques usually reduce the area enclosed by the curve. Several smoothing techniques are introduced and discussed. Finally, we proposed an approach named "Anglee" which is designed to filter out high frequency noise while the low frequency portion and the area enclosed are preserved.

Digital Video Special Effect (2005)

Instructor: Prof. Irfan Essa

Fancy movie effects have been created. For the final production, together with two teammates, I went through the whole process of film production. Our effect was like the one in HP's well-known commercial picture book but funnier.

AGORA (2004)

Instructor: Prof. Colin Potts

Worked with a student from dept. of architecture. The goal is to assist residents of a community in the processes of selecting a new community building while negotiating with architecture companies. An innovative system was designed and prototyped to help users understanding the 3D model and other information provided by architects.

Animating Chinese Landscape Painting (2002)

Instructor: Prof. Ming Ouhyoung

Utilize IBMR (Image-based modeling and rendering) approaches for making fly-through and walk through animations from a single large landscape painting or panorama. The result animation demonstrates the characteristics of traditional Chinese landscape painting including the use of abstraction. e.g. spiritual journey and moving-point perspective

Minor Projects in Graphics completed:

- # Patina weathering using Gamma-ton tracing (paper from SIGGRAPH 2005)
- # Ray tracing
- # Voronoi diagrams with graphics hardware
- # Shadow volumes using stencil buffers
- # T-mesh editor
- # T-Mesh subdivision and smoothing
- # Image quilting and transfer (paper from SIGGRAPH 2001)
- # All-Software model renderer
- # OpenGL 3D viewer

Minor Projects in Vision completed:

- # Illumination subspace of images
- # Feature matching for location/object recognition
- # Making a Quicktime VR movie using SIFT and RANSAC
- # Dual Photography (paper from SIGGRAPH 2005)

Publication

Shun-Chuan Chen, Hsuan-Wei Chen, **Ang Lee**, Kuo-Hao Chao , Yu-Cheng Huang and Feipei Lai, "E-Vanguard for Emergency - A Wireless System for Rescue and Healthcare," 5th International Workshop on Enterprise Networking and Computing in Healthcare Industry, Santa Monica, USA, Jun. 2003

Translation (English to Chinese)

Massachusetts Institute of Technology (MIT) Open Course Ware:

MAS.110 Fundamentals of Computational Media Design

MAS.630 Affective Computing

MAS.963 Ambient Intelligence

Leadership

- 9/00 - 6/01 Student Representative
College of Electrical and Computer Engineering, National Taiwan Univ.
- 9/00 - 6/01 Captain
Taekwondo School Delegate team, National Taiwan Univ.
- 6/99 - 6/02 Leader of academic section
Chinese Qui-Yi Art Club, National Taiwan Univ.
- 6/99 - 7/99 Delegate of Taiwan Delegation
Future Leader Summit, Washington DC, USA

Membership

- member IEEE
- member ACM / SIGGRAPH
- founding member Pastel Art Association ROC
- member IBM (International Brotherhood of Magicians)

Certificates

- Taekwondo international certificated Black belt 3rd don
- Certificated water-saving lifeguard