

Guang Shu

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Education

2002-2006 **B.Sc.**, Department of Control Science and Engineering,
Huazhong University of Science and Technology (HUST), Wuhan, China
Overall GPA **88.8 / 100** Major: **90/100** Rank **7 / 260 (Top 3%)**

2006-2009 **M.Sc.**, Institute of Image Processing and Pattern Recognition,
Shanghai Jiao Tong University (SJTU), Shanghai, China
Overall GPA **3.5 / 4.0**

Research Interests

Computer Vision, Image Processing and Visualization

Research Experiences

3D Face Modeling (supported by 863 Hi-Tech R&D Program of China, 2007-2008)

- Proposed a new fast and robust approach to automatically modeling 3D face from only one image, combining Morphable Models with Deforming a General Model
- Involved many algorithms such as Adaboost, ASM, Morphable Models, Deforming a General Model, Interpolating, Texture Mapping, Illuminations Rendering
- Implemented a platform for 3D Face Modeling with C++, OpenGL and OpenCV

3D Facial Animation and Caricaturing (2008)

- Synthesized various Facial Expression Animation of the 3D Facial Model.
- Proposed a new 3D Facial Caricaturing approach which exaggerating the global configuration and local shape separately to create various caricaturing styles.

Face Recognition (supported by 863 Hi-Tech R&D Program of China, 2006-2008)

- Participated in developing a video-based Face Recognition System
- Reconstructed 3D Faces and synthesize virtual faces for identity recognition and pose estimation

Image Segmentation (Undergraduate Thesis, 2006)

- Implemented several image segmentation algorithms including Threshold, Edge, Region Growing, Color Space and Texture with C++
- Evaluated these Segmentation Algorithms according to different industrial applications.
- Awarded 2006 Excellent Undergraduate Thesis of HUST.

Publications

- **G. Shu**, L. Yao, X. Yang, J. Yang, Automatic 3D Facial Caricaturing from a Single Image, 4th International Symposium on Visual Computing (ISVC08), accepted.
- **G. Shu**, L. Yao, L. Chen, J. Yang, 3D Face Reconstruction from one Image Based on a Generic Model, Journal of Shanghai Jiao Tong University, China (**EI** index), accepted.
- X. Yang, Y. Zhou, T. Zhang, **G. Shu**, J. Yang, "Gait Recognition Based on Dynamic Region Analysis," Signal Processing, Volume 88, Issue 9, September 2008, Pages 2350-2356.
- X. Yang, Y. Zhou, **G. Shu**, E. Zheng, J. Yang, "Manifold Learning based Gait Recognition using Gabor phase spectrum", Acta Electronica Sinica, China (EI index), accepted.
- C. Du, J. Yang, Q. Wu, **G. Shu**, X. Yang. LDA + affinity propagation clustering method for face recognition. Digital Signal Processing (Elsevier Science Press), under second review.
- C. Du, J. Yang, Q. Wu, **G. Shu**, X. Yang. Gabor-Based Neural Network Dimensionality Method for Face Recognition. Microwave and Optical Technology Letters, under review.

Honors and Awards

- 2008, HUAWEI Scholarship for Excellent Master Students in SJTU
- 2006, Excellent Graduates of HUST, Bachelor Honor Degree of HUST
- 2005, Outstanding student Scholarship of HUST
- 2004, Outstanding student Scholarship of HUST
- 2003, Outstanding student Scholarship of HUST

Computer Skills

- Expert at Image Processing and Computer Graphics program development
- Sufficient project developing experiences with Visual C++, OpenGL and OpenCV.
- Fluency in C++ and MATLAB.
- Qualification Certificate of Computer and Software Technology of China (Software Engineer).

English Skills

- GRE: Quantitative 800, Verbal 490, Analytical Writing 4.0
- TOEFL(Internet-based Test): Total 94, Reading 28, Listening 24, Speaking 22, Writing 20