

Academic Staff Resume

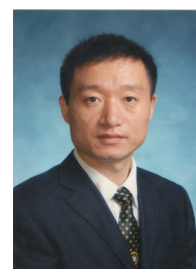
Associate Professor Cai, Zhan Chuan

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Academic Qualification:

Ph.D. in Computer Software and Theory , Sun Yat-sen University

Teaching Area

COMPUTER LANGUAGE AND PROGRAMMING

FUNDAMENTALS OF ADVANCED ENGINEERING MATHEMATICS

Research Area

Computer Graphics and Image Processing

lunar data processing and Analysis

Multimedia Information Security

Working Experience

Visiting scholar University of Nevada,Las Vegas,2007

Academic Publication

Selected paper:

1. CAI ZhanChuan,ZHENG CaiMu,TANG ZeSheng,QI DongXu, Lunar Digital Elevation Model and Elevation Distribution Model Based on Chang'E-1 LAM data, Science China : Technological Science, Vol.53 No.9, 2010: 2558-2568.
2. CAI ZhanChuan,LIANG Yanyan,LI Jian, TANG ZeSheng,QI DongXu, Digital Elevation Model of the Moon from the Chang'E-1 Laser Altimeter , Progress in Geophysics, Vol.25 No.4, 2010: 1153-1160.
3. CAI ZhanChuan,ZHENG CaiMu,HUANG Jing,LIANG Yanyan, A Method of Image Zooming-in Based on Mixed Many-knot Spline Surface Interpolation, Acta Scientiarum Naturalium Universitatis Sunyatseni, Vol.50 No.2, 2011: 16-19.
4. Zhanchuan Cai,Wei Chen,Zesheng Tang,Lunar Trend Surface Analysis Based on GF system, Journal of Information and Computational Science, Vol.8 No.8, 2011: 1423-1430.
5. Mengjie Ye,Jian Li,Yanyan Liang,Zhanchuan Cai,Zesheng Tang, Automatic Seamless Stitching Method for CCD Images of Chang'E-1 Lunar Mission, Journal of Earth Science, Vol. 22, No. 5, p. 610–618, October 2011
6. CAI ZhanChuan, CHEN Wei, QI DongXu, TANG ZeSheng,A Class of General Franklin Functions and Its Application, Chinese Journal of computers, Vol.32 No.10, 2009: 2004-2013.

7. Zhanchuan Cai, Xiongli Yang, Zesheng Tang, The Plotting of Lunar Contour Map Based on Chang'E-1 LAM Data, Journal of Macau University of Science and Technology, Vol.3 No.2, 2009: 1-7.
8. Wei Chen, ZhanChuan Cai, ZeSheng Tang, DongXu Qi, From GF-system to V-system :A New Construction Method of V-system, Journal of Macau University of Science and Technology, Vol.3 No.2, 2009: 8-14.
9. Caimu Zheng, ZhanChuan Cai, ZeSheng Tang, Least Square Fitting Method with Many-knot Basis Function to Smooth the Topographic Data of CE-1, Journal of Macau University of Science and Technology, Vol.3 No.1, 2009: 1-9.
10. Yanyan Liang, Jian Li, Mengjie Ye, Zhanchuan Cai, Orthogonal Representation of Parameterized Surface Group Model and Its Multiresolution Editing, Journal of Macau University of Science and Technology, Vol.2 No.2, 2008: 1-7.
11. Zhanchuan Cai, Hui Ma, Wei Sun, Dongxu Qi, Analysis of Frequency Spectrum for Geometric Modeling in Digital Geometry , in the volume "Wavelet Analysis and Applications" in the Springer Series "Applied and Numerical Harmonic Analysis". 525-542, 2006
12. Zhanchuan Cai, Wei Sun, Dongxu Qi , A classification and recognition method for planar figures based on complete orthogonal U-system. Journal of Software, 2006, 17 (Suppl.):21-27.
13. Zhanchuan Cai, Wei Sun, Dongxu Qi , Matching 2D Shapes Using U Descriptors, Lecture Notes In Computer Science , Vol.4035, :209-220, 2006
14. Zhanchuan Cai, Wei Sun, Changzhen Xiong, Dongxu Qi , . A New Scheme for Watermarking Engineering graph. International Journal of CAD/CAM Vol.6, No. 1, 99-104, 2006

Professional Certification and Awards

2012 Third Prize of Macau Science and Technology Award - Natural Science Award (Co-awarded)

Professional Society Membership