Jun Zhang

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2016.04 - present	PhD student in College of Engineering and Computer Science,	Canberra
	Australian National University	
2014.04 - 2015.10	Visiting student in Institude of Computer Science and Technology,	Beijing
	Peking University	
2012.09 - 2015.04	M.S. in Computer Applied Technology, Northwestern Polytechnical	Xi'an
	University	
2008.09 - 2012.06	B.E. in Electrical Engineering and Automation, Northwestern	Xi'an
	Polytechnical University	

Research Experience

2014.10 - present Visual Similarity based 3D Shape Retrieval

Beijing

- Design a high-level contextual dictionary to improve the bag-of-features.
- Implement an efficient multi-view shape matching scheme to accomplish 3D shape retrieval.

2014.05 – 2014.09 3D m

3D mesh automatic segmentation based on Convexity Estimation and Fast Marching

Beijing

- Design an effective 3D mesh automatic segmentation algorithm to decompose 3D models into semantic
- Utilize the segmentation method designed to construct the canonical forms of 3D models and apply to a non-rigid shapes retrieval procedure.

2013.09 - 2014.04

3D Shape Recognition System based on Hidden Conditional Random Fields

- Down-sample points on the surface of 3D shapes, then extract the scale-invariant heat kernel signatures on the sample points.
- Construct a hidden conditional random field model to minimize the energy functions considering the local features and contextual information between local points.

2013.03 - 2013.09

3D Shape Automatic Classification via Structural Support Vector Machine

Xi'an

Xi'an

- Extract the geodesic distance matrix of 3D shape, then reduce the dimensionality of the matrix and implement matrix decomposition. Finally treat the eigenvalue vector as global feature.
- Apply structural SVM method to supervised learning of the global features. Then implement 3D shapes multi-class classification using the learnt model.

Publication

[1] **Jun Zhang**, Zhouhui Lian and Zhenbao Liu, "CEFM: A Heuristic Mesh Segmentation Method based on Convexity Estimation and Fast Marching", Visigrapp 2015. (accepted)

[2] **Jun Zhang**, Zhenbao Liu, and Shuhui Bu, "Automatic Classification Method of 3D Shapes based on Structural SVM", 2014, *Chinese Patent.* (submitted)

Awards

2012, 2013, 2014 Award of the Second Prize of the National Scholarship, NWPU.

2009 Award of the Third Prize of the Mathematical contest in modeling, NWPU.

2009, 2010, 2011, 2012 First/Second place of the school football match (Group Awards, Important Role).

Skills

Programming Skills: Matlab, C/C++, openCV, openGL etc.

Specialized Software: Meshlab, 3DMax, Geomagic.

OS: Windows, Linux (Ubuntu), Mac OS.

English: The certificate of CET-6 and Intermediate BEC. Good reading skills and comprehension of English papers.

Personalities&Hobbies

I am energetic, confident, open-minded and humorous, and have a broad hobby: Sport, Soccer, Music, Movies, Reading, Photography, Travel, Auto, Electronics, etc.