

# Xiaoshui Huang

University of Sydney – Sydney, NSW Australia

<https://xiaoshuihuang.github.io/>

## Education

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<b>University of Technology Sydney</b> <i>Ph.D. in Computer Science</i>	2015.02-2018.08
<b>Shenyang Aerospace University</b> <i>M.Eng. in Computer Science</i>	2011.09-2014.01
<b>Taiyuan University of Technology</b> <i>B.Sc. in Geometric Information System</i>	2006.09-2010.07

## Work Experience

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<b>University of Sydney:</b> <i>Postdoctoral Research Associate</i>	2019.09-Present
<b>University of Technology Sydney</b> <i>Research Fellow</i>	2019.01-2019.09
<b>Tsinghua University:</b> <i>Research Assistant</i>	2014.02-2015.02

## Teaching

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**UTS 48450:** Real-time Operating System – Tutor  
**UTS 49238:** Telecommunication Networks Management – Tutor

## Grants

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1. **Xiaoshui Huang**, Matthew Field, Lois Holloway, Paul Keall, Shalini Vinod. "Analysing lung cancer guideline compliance with patient treatment outcomes using deep learning". *Ingham Research grant*. 2020–2021, **\$20K**.
2. Ali Haidar, Lois Holloway, Matthew Field, **Xiaoshui Huang**, Nasreen Kaadan, Farhannah Aly, Vikneswary Batumalai. "Unsupervised Machine Learning for Detecting and Fixing Variations in Cancer Patients Medical Records". *Ingham Research grant*. 2020–2021, **\$15K**.

## Patents

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1. Lixin Fan, **Xiaoshui Huang**, Qiang Wu, Jian Zhang. Point cloud matching method. 2019, US20190295266A1. **US patent**.
2. **Xiaoshui Huang**, Lixin Fan, Jian zhang, Qiang Wu. Cross-source point cloud registration. 2019, GB2566443A. **UK patent**.

## Publications

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### Journals:

- **Xiaoshui Huang**, Lixin Fan, Qiang Wu, Jian Zhang, Chun Yuan. A coarse-to-fine algorithm for matching and registration in 3D cross-sourced point clouds. Accepted by Transactions on Circuits and Systems for Video Technology (T-CSVT). 2017. (**JCR Q1**)

- **Xiaoshui Huang**, Jian Zhang, Lixin Fan, Qiang Wu, Chun Yuan. "A Systematic Approach for Cross-Source Point Cloud Registration by Preserving Macro and Micro Structures," in IEEE Transactions on Image Processing (T-IP), vol. 26, no. 7, pp. 3261-3276, July 2017. (JCR Q1)

#### Conferences:

- **Xiaoshui Huang**, Guofeng Mei, Jian Zhang. Feature-metric Registration: A Fast Semi-supervised Approach for Robust Point Cloud Registration without Correspondences. In Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2020. (CCF A)
- **Xiaoshui Huang**, Lixin Fan, Qiang Wu, Jian Zhang, Chun Yuan. Fast Registration for cross-source point clouds by using weak regional affinity and pixel-wise refinement. International Conference of Multimedia Expro (ICME) 2019. (CCF B)
- **Xiaoshui Huang**, Chun Yuan, and Jian Zhang, 2015, September. Graph Cuts Stereo Matching Based on Patch-Match and Ground Control Points Constraint. In Pacific Rim Conference on Multimedia (PCM) (pp. 14-23). Springer International Publishing. (CCF C)
- Tao Chen, Jian Zhang, Guo-Sen Xie, Yazhou Yao, **Xiaoshui Huang**, Zhenmin Tang. Classification Constrained Discriminator for Domain Adaptive Semantic Segmentation. International Conference of Multimedia Expro (ICME) 2020. (CCF B)
- Anan Du, **Xiaoshui Huang**, Jian Zhang, Lingxiang Yao, Qiang Wu. KPSNET: Keypoint detection and feature extraction for point cloud registration. International Conference on Image Processing (ICIP) 2019. (CCF C)
- Shoujin Wang, Liang Hu, Longbing Cao, **Xiaoshui Huang**, Defu Lian, Wei Liu. Attention-based Transactional Context Embedding for Next-Item Recommendation. AAAI 2018. (CCF A)

#### Awards

- International research scholarship: awarded for research project from UTS
- Faculty of Engineering and Information Technology Scholarship: awarded for research project from UTS
- FEIT One-off Research Scholarship: awarded for research publication. 2015, 2016, 2017
- Higher Degree by Research Publication Award: awarded for 2017 high degree research publications.
- Nokia Industrial Awards: awarded for the patent granted between UTS and Nokia. 2017

#### Academic Service

##### Journal Reviewer:

IEEE Transactions on Image Processing  
 IEEE Transactions on Circuits and Systems for Video Technology  
 IEEE Transactions on Multimedia  
 IEEE Sensors Journal  
 IEEE MultiMedia  
 EURASIP Journal on Image and Video Processing

**Conference Reviewer:**

International Conference on Multimedia Expro

Computer Vision and Pattern Recognition Workshop

International Conference on Image Processing

International Conference on Digital Image Computing: Techniques and Applications