Xiaoshui Huang

University of Sydney – Sydney, NSW Australia
https://xiaoshuihuang.github.io/

Education

University of Technology Sydney 2015.02-2018.08
Ph.D. in Computer Science

Shenyang Aerospace University 2011.09-2014.01
M.Eng. in Computer Science

Taiyuan University of Technology 2006.09-2010.07
B.Sc. in Geometric Information System

Work Experience

University of Sydney: 2019.09-Present
Postdoctoral Research Associate

University of Technology Sydney 2019.01-2019.09
Research Fellow

Tsinghua University: 2014.02-2015.02
Research Assistant

Teaching

UTS 48450: Real-time Operating System – Tutor

UTS 49238: Telecommunication Networks Management – Tutor

Grants

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

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

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

UTS International research scholarship.
UTS FEIT Research Scholarship.
UTS FEIT One-off Research Scholarship.
Higher Degree by Research Publication Award.
Nokia patent award.

Academic Service

Journal Reviewer:
IEEE Transactions on Image Processing (TIP)
IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
IEEE Transactions on Multimedia (TMM)
IEEE Intelligent Systems
IEEE Sensors Journal
IEEE MultiMedia
EURASIP Journal on Image and Video Processing

Conference Reviewer:
IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
International Conference on Multimedia Expro (ICME)
International Conference on Image Processing (ICIP)
International Conference on Digital Image Computing: Techniques and Applications (DICTA)