

Zhipeng Cai (蔡志鹏)

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Research Area: 3D Registration, Point Cloud Processing, Computer Vision, Machine Learning



Education

- ◆ 2009-2013 BS degree of Computer Science in Xiamen University
- ◆ 2013-2016 MS degree of Computer Science in Xiamen University ([Xiamen Key Laboratory of Geospatial Sensing and Computing](#))
- ◆ 2016-now Ph.D student at School of Computer Science, University of Adelaide ([ACVT Lab](#))

Research publications & Projects

Publications:

1. 3D-PatchMatch: an Optimization Algorithm for Point Cloud Completion, EI, ICSDM 2015, **First author**
2. Occluded Boundary Detection for Small-footprint Ground-borne LIDAR Point Cloud Guided by Last-echo, IEEE Geoscience and Remote Sensing Letters, 2015, **First author**
3. Spatial-related Traffic Sign Inspection for Inventory Purposes Using Mobile Laser Scanning Data, IEEE trans. on Intelligent Transportation System, 2015, **Fifth author**
4. Patch-Based Semantic Labeling of Road Scene Using Colorized Mobile LiDAR Point Clouds, IEEE trans. on Intelligent Transportation System, 2015, **Fourth author (second student author)**
5. Cascade Framework for Object Extraction in Image Sequences, EI, CVRS 2012, **Second author**
6. Automatic Road Extraction from Mobile Laser Scanning Data, EI, CVRS 2012, **Second author**

Patent:

1. Three-dimensional point cloud auto-completion method publication number: CN 104063898 A
2. Interactive three-dimensional point cloud color editing method Publication number: CN 103489224 A

Project:

1. the Building of the Online Clothing Platform with 3D Visualization Based on WebGL
 - **the leader of the project group of the National University Student Innovation Program.**
 - The project has built an online clothing platform which we called Eclothing with 3D visualization based on WebGL and has gain the provincial fund.

TA-ship:

1. Pattern Recognition; (Bachelor course)
2. Machine Learning (Master course)

Awards

- ◆ **2013 Excellent Graduation Thesis**
- ◆ **2013 The CCF Outstanding Undergraduate Award**
- ◆ **2012 The Meritorious Winner of 2012 Mathematical Contest In Modeling Certificate of Achievement**
- ◆ 2012 Annual scholarship of Xiamen University