Journal Club

No.	Content	Lecturer	Date	Remark
1	The analysis of the LOAM's inputs	Baihan Luo	20/04/2017	Understanding of SLAM and GPS
2	Lidar Odometry And Mapping	Taichen Liu	28/04/2017	
3	Improving positioning accuracy of vehicular navigation system during GPS-ML Method	Xudong Zhang	05/05/2017	
4	The Normal Distributions Transform- A New Approach to Laser Scan Matching	Dove	12/05/2017	
5	Sensor Technology Topic	Simon	26/05/2017	
6	GPS To ENU-Local Coordinate Transform	Jiale Yang	02/06/2017	
7	A fast and robust local descriptor for 3D point cloud registration	Xudong Zhang	09/06/2017	Point Cloud Registration
8	Efficient, General Point Cloud Registration With Kernel Feature Maps	Taichen Liu	16/06/2017	
9	Automatic registration of large-scale urban scene point clouds based on semantic feature points	Dove	07/07/2017	
10	The performance comparison between Lidar and RGB-D	Simon	14/07/2017	
11	Real-time Compression of Point Cloud Streams	Xudong Zhang	24/08/2017	Point Cloud Compression
12	Point Cloud Attribute Compression using 3-D Intra Prediction and Shape-Adaptive Transforms	Lu Yu	11/08/2017	
13	Large-Scale 3D Point Cloud Compression Using Adaptive	Yingshi Li	18/08/2017	
14	O-POCO: Online POint cloud COmpression mapping for visual odometry and SLAM	Dove	25/08/2017	
15	Velodyne SLAM, 2011	Simon	01/09/2017	
16	Improving Google's cartographer 3D mapping by continuous-time SLAM	Xudong Zhang	08/09/2017	

ORB-SLAM a Versatile and Accurate Monocular SLAM System

Online Global Loop Closure Detection for Large-Scale Multi-Session

Appearance-Based Loop Detection from 3D laser Data Using the Normal Distributions Transform

A Survey of ADAS Technologies for the Future Perspective of Sensor Fusion

A Spline-Based Trajectory Representation for Sensor Fusion and Rolling Shutter Cameras

A GPS and laser-based localization for urban and non-urbanoutdoor environments

Robust Curb Detection with Fusion of 3D-Lidar and Camera Data

Autonomous driving at Ulm University: A modular, robust, and sensor-independent fusion approach

YOLO9000: Better, Faster, Stronger

Bag-of-Words Representation in Image Annotation: A Review

Evaluation of Local Detectors and Descriptors for Fast Feature Matching

Structured-light-based Stereo Vision

Visual-lidar Odometry and Mapping: Low drift, Robust, and Fast

On Degeneracy of Optimization-based State Estimation Problems

Enabling Aggressive Motion Estimation at Low-drift and Accurate Mapping in Real-time

Optimizing LOAM Performance

Semantics-Preserving Bag-of-Words Models and Applications

An Introduction to Inertial Navigation

Loose and Tight GNSS INS Integrations: Comparison of Performance Assessed in Real Urban Scenarios

An Introduction to the Kalman Filter

KITTI Odometry Benchmark

Improving Poor GPS Area Localization for Intelligent Vehicles

Comparison of 3D interest point detectors and descriptors for point cloud fusion

NDT Localization Outline

Hand-Eye Calibration

Blockchain and Bitcoin Basics

Principles of GNSS Positioning

Review of LOAM: Algorithm and Code

Review of NDT: Localization and Initialization

Filter Based Data Fusion

Review of ORB-SLAM

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Loop Closure

Detection

Sensor Fusion

Feature

SLAM Optimization

Feature

Sensors

SLAM Optimization

Feature

Blockchian

GNSS

SLAM Optimization

Feature

Sensor Fusion

SLAM Optimization

15/09/2017

22/09/2017

13/10/2017

20/10/2017

27/10/2017

03/11/2017

10/11/2017

17/11/2017

24/11/2017

01/12/2017

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02/03/2018

09/03/2018

16/03/2018

23/03/2018

29/03/2018

06/04/2018

13/04/2018

20/04/2018

27/04/2018

Lu Yu

Yingshi Li

Xudong Zhang

Simon

Lu Yu

Taichen Liu & WEN Weisong

Xudong Zhang

Yingshi Li

Yuehong Huang

Lu Yu

Taichen Liu

Zhaorui Zhang

Simon

Lu Yu

Taicheng Liu

Taixiang Cui

Yingshi Li

Shunli Wang

Xing Nan

Jiale Yang

Lu Yu

Simon

Yingshi Li

Taicheng Liu

Zhaorui Zhang

Lu Yu

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Taixiang Cui

Jiale Yang

Taichen Liu

Zhaorui Zhang