

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	Loop Closure Detection
16	Improving Google’s cartographer 3D mapping by continuous-time SLAM	Xudong Zhang	08/09/2017	
17	ORB-SLAM a Versatile and Accurate Monocular SLAM System	Lu Yu	15/09/2017	
18	Online Global Loop Closure Detection for Large-Scale Multi-Session	Yingshi Li	22/09/2017	
19	Appearance-Based Loop Detection from 3D laser Data Using the Normal Distributions Transform	Xudong Zhang	29/09/2017	
20	A Survey of ADAS Technologies for the Future Perspective of Sensor Fusion	Simon	13/10/2017	Sensor Fusion
21	A Spline-Based Trajectory Representation for Sensor Fusion and Rolling Shutter Cameras	Lu Yu	20/10/2017	
22	A GPS and laser-based localization for urban and non-urbanoutdoor environments	Taichen Liu & WEN Weisong	27/10/2017	
23	Robust Curb Detection with Fusion of 3D-Lidar and Camera Data	Xudong Zhang	03/11/2017	
24	Autonomous driving at Ulm University: A modular, robust, and sensor-independent fusion approach	Yingshi Li	10/11/2017	
25	YOLO9000: Better, Faster, Stronger	Yuehong Huang	17/11/2017	Feature
26	Bag-of-Words Representation in Image Annotation: A Review	Lu Yu	24/11/2017	
27	Evaluation of Local Detectors and Descriptors for Fast Feature Matching	Taichen Liu	01/12/2017	
28	Structured-light-based Stereo Vision	Zhaorui Zhang	08/12/2017	
29	Visual-lidar Odometry and Mapping: Low drift, Robust, and Fast	Simon	15/12/2017	SLAM Optimization
30	On Degeneracy of Optimization-based State Estimation Problems	Lu Yu	22/12/2017	
31	Enabling Aggressive Motion Estimation at Low-drift and Accurate Mapping in Real-time	Taicheng Liu	29/12/2017	
32	Optimizing LOAM Performance	Taixiang Cui	05/01/2018	
33	Semantics-Preserving Bag-of-Words Models and Applications	Yingshi Li	12/01/2018	Feature
34	An Introduction to Inertial Navigation	Shunli Wang	19/01/2018	Sensors
35	Loose and Tight GNSS INS Integrations: Comparison of Performance Assessed in Real Urban Scenarios	Xing Nan	26/01/2018	
36	An Introduction to the Kalman Filter	Jiale Yang	02/02/2018	
37	KITTI Odometry Benchmark	Lu Yu	09/02/2018	SLAM Optimization
38	Improving Poor GPS Area Localization for Intelligent Vehicles	Simon	23/02/2018	
39	Comparison of 3D interest point detectors and descriptors for point cloud fusion	Yingshi Li	02/03/2018	Feature
40	NDT Localization Outline	Taicheng Liu	09/03/2018	
41	NDT Map Building	Zhaorui Zhang	16/03/2018	
42	NDT Scan Registration	Jiale Yang	23/03/2018	