ORB (Oriented FAST and Rotated BRIEF) – feature descriptor, much like SURF or SIFT. SIFT, SURF are patented, ORB is free to use. Uses FAST keypoint detector and BRIEF descriptor.

Open-Source – freely available and may be redistributed and modified

Monocular – one camera

Stereo – two cameras

RGB-D – red, green, blue and depth channels in the image

Map reuse – create a map and then use it

Loop closing – robot revisits a place and can use that information to correct its position

Relocalization – robot gets lost but can find its position again

Works in real-time – the system is running along with the robot, no calculations is done afterwards

Back-end – part of the system that is not directly accessed by the user

Bundle adjustment – minimizing the error between the observed and projected location of an object. When a robot is moving around and creating a map, it will sometimes views an object from the map that doesn’t agree with what it is seeing in the current view, this error should be minimized.

Trajectory – how the robot has moved

Metric scale - (don’t mention) using meter

Lightweight – uses less memory (RAM)

Leverages – takes advantage of

Visual odometry – the process of determining the position and orientation of a robot by analyzing the associated camera images

Visual odometry tracks - ? where the robot has been according to the visual odometry

Unmapped regions – region to where the map doesn’t reach

Map points –

Zero-drift localization – find its position without continuously making small errors which becomes large after a while

Public sequences – public tests

State-of-the-art – as good as it gets today

Out-of-the-box – works without having to configure it

Pointcloud – a set of points in space

ICP – iterative closest point

NEXT : understand how everything connects.