

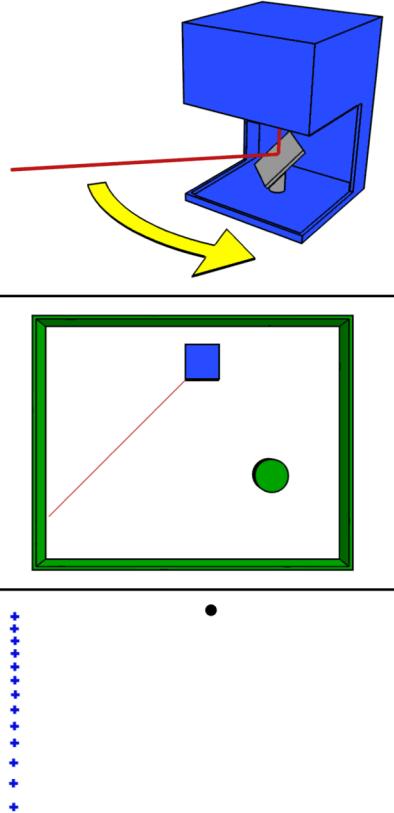


Robotic Perception

Sensor: Lidar

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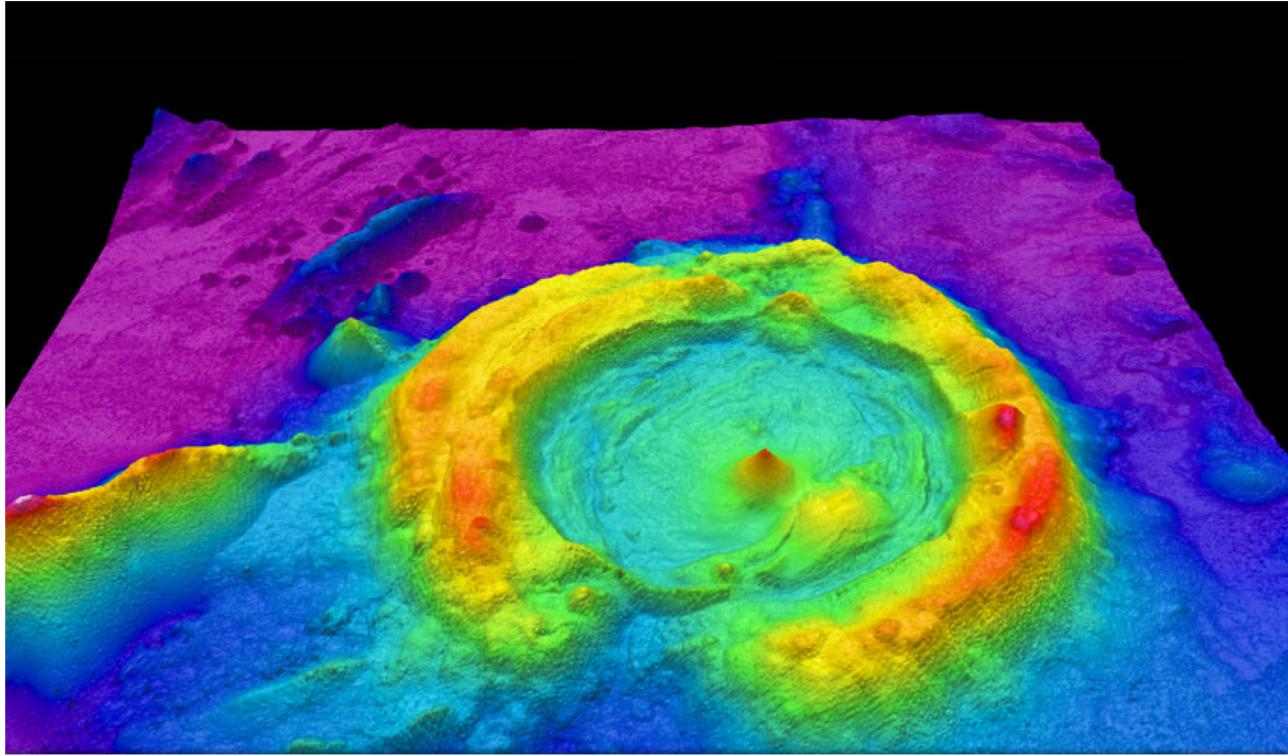
Lidar



| Lidar

- Lidar is a **surveying** method that measures distance to a target by illuminating the target with **pulsed laser** light and measuring the reflected pulses with a sensor.

Lidar in 3D Maps



Depth map of seafloor geology by airborne Lidar

Lidar in 3D Maps



LIDAR is also used to generate huge 3D maps for the self-driving car navigation. It is also used – particularly by Google – to detect pedestrians and cyclists, traffic signs and other nearby obstacles.

Pitfalls of Lidar



Self-Driving Uber Car Kills Pedestrian in Arizona

Wakabayashi, "Self-Driving Uber Car Kills Pedestrian in Arizona, Where Robots Roam," The New York Times, 19-Mar-2018. [Online]. Available: <https://www.nytimes.com/2018/03/19/technology/uber-driverless-fatality.html>. [Accessed: 10-May-2019].