Paper ID: 63101 student

Key Technologies (7) Key Technologies (2) (2)

Author: Dr. SANDhYA RAO India, sandya.rao@notionrobotics.com

DESIGN AND DEVELOP ADVANCED VISION SYSTEMS

Abstract

Notion Robotic Lab designs and to develops world-class 3D LIDAR and infrared camera technologies to enhance the safe operation of the International Space Station and support future space exploration. The system will have three sensors, including a 3D laser, a high-definition camera and an infrared camerato monitor and maintain the ageing infrastructure of the ISS. With the new vision system, which is the size of a microwave oven, The system will detect any damage in external surfaces of the ISS due to the harsh space environment and the station's natural ageing. The orbiting ISS is frequently being hit by small meteorites and orbital debris. The Company will focus on advanced design and also development with the ISS in various Space Agency.

Keywords. 3D Lidar, Infrated Camera, ISS Advanced Vision Systems