

The background image is a vibrant landscape photograph. It features a lush green valley in the foreground with a small village of white houses. In the mid-ground, a large, light-colored house with dark shutters is prominent. The background is dominated by steep, rocky mountains with patches of snow under a clear blue sky. A large, thin blue circle is centered over the scene, and a smaller yellow circle is positioned over the large house.

Vision assistive systems using RGB-D cameras

A. S. Mastrogeorgiou

Ph.D. Candidate
Control Systems Lab
School of Mechanical Engineering
National Technical University of Athens
amast@central.ntua.gr

Presentation Overview

1

What is RGB-D

2

Facts

3

AI & Voice

4

Initial Results

5

Work to be done

RGB-D

Basic Definitions:



FACT

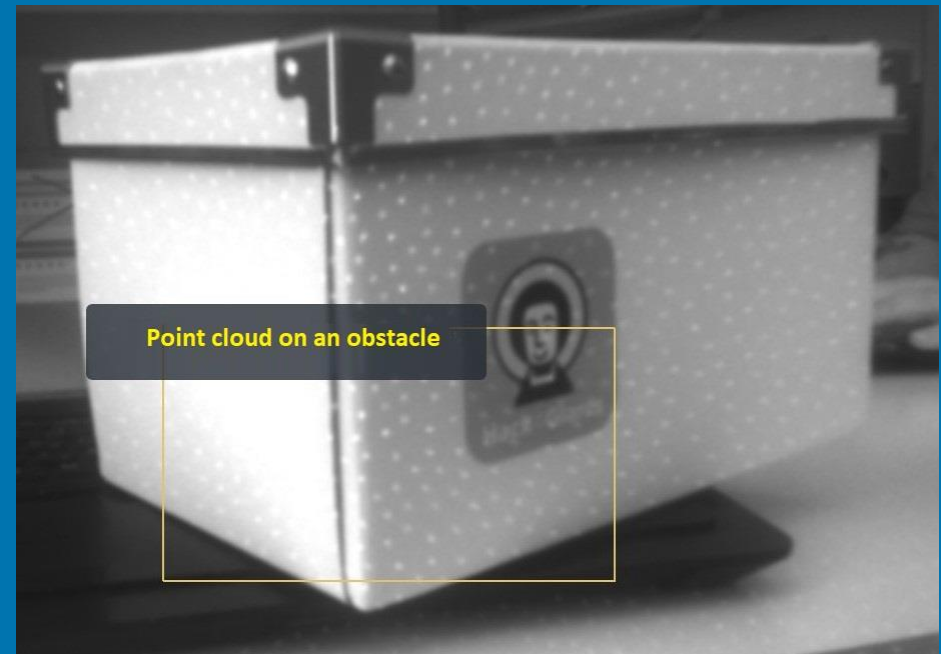
RGB cameras are getting incredibly small

Form Factor



Initial Results

Point measurements on an obstacle



Work to be done

Critical parts that
need to be developed
and tested

Various lighting conditions
[outdoors, indoors, low light etc.]

Noise reduction
[reflections]

Voice guide
[measurements to speech]

Learning
[recognize and categorize obstacles]



Thank you