3D Indoor Mapping using ROS and Microsoft Kinect sensor

Chirag Shah and Srijal Poojari

***Abstract*—The Robot Operating System (ROS) is a exible framework for developing software with tools, libraries and conventions that facilitate the creation of complex robot behaviour on a wide variety of robotic platforms. This project deals with the exploring the ROS framework for development of a robotic system with various sensors and actuators in order to understand the underlying concepts and to create a robot/quadcoptor capable of forming a 3D map of a given environment using a depth camera (Microsoft Kinect).**

***Index Terms*—ROS, Robot Operating System, 3D-Mapping, Microsoft kinect sensor**

I. Introduction

THIS demo file is intended to serve as a "starter file" for IEEE journal papers produced under LaTeX using IEEEtran.cls version 1.8b and later. I wish you the best of success.

mds
August 26, 2015

A. Subsection Heading Here

Subsection text here.

1) Subsubsection Heading Here: Subsubsection text here.

II. Conclusion

The conclusion goes here.

Appendix A
Proof of the First Zonklar Equation

Appendix one text goes here.

Appendix B

Appendix two text goes here.

Acknowledgment

The authors would like to thank...

References

[1] H. Kopka and P. W. Daly, *A Guide to LaTeX*, 3rd ed. Harlow, England: Addison-Wesley, 1999.

PLACE PHOTO HERE

Michael Shell Biography text here.

John Doe Biography text here.

Jane Doe Biography text here.