

RGB-D Object Recognition using Deep Learning

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Abstract—

I. INTRODUCTION

Define and motivate the problem, discuss background material or related work, and briefly summarize your approach.

Photography has remained generally unchanged since the first photograph was taken in 1816 [todo ref]. The proceeding years since have seen a plethora of technical advances bettering image quality, speed of image capture, as well as other aspects, but imaging has remained a two-dimensional art. Developments in recent years, however, have begun to fundamentally alter how we consider imaging, with the release of the first Xbox Kinect in November 2010 [todo ref]. With this launch, consumers and researchers alike were able to view the world in three dimensions, opening up a second modality to image processing.

II. DETAILS OF APPROACH

Include any formulas, pseudocode, diagrams – anything that is necessary to clearly explain your system and what you have done. If possible, illustrate the intermediate stages of your approach with result images.

III. RESULTS

Clearly describe your experimental protocols. If you are using training and test data, report the numbers of training and test images. Be sure to include example output figures. Quantitative evaluation is always a big plus (if applicable). If you are working with videos, put example output on YouTube or some other external repository and include links in your report.

IV. DISCUSSION AND CONCLUSIONS

Summarize the main insights drawn from your analysis and experiments. You can get a good project grade with mostly negative results, as long as you show evidence of extensive exploration, thoughtfully analyze the causes of your negative results, and discuss potential solutions.

V. INDIVIDUAL CONTRIBUTIONS

Required if there is more than one group member, including URLs for any external code or data used.

REFERENCES

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