Ghioci Vlad-Stefan 13 October, 2020

Report title

The research report will be entitled Single-view 3D Object Reconstruction.

Brief description

There has been a great interest for the past few years in regard to 3D object reconstruction from images, in both the broad domain of Computer Vision and many others, such as Medical Imaging, Computer Graphics, Virtual Reality or Digital Media and Communication. The task implies the inference of the 3D shapes of objects, based on information extracted from 2D images. Complexity and computational cost of such process is dependent on various factors such construction method, number of input images, desired graphical fidelity or necessity real-time performance.

My survey research will be focused on recent developments of machine learning techniques and subsequent results. I will discuss and review the sub-task of *single-image* reconstruction, which poses greater challenges, as it implies inference of object depth and structural information, and has more interesting and direct applicability in real life problems.

References

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Presentation

I plan to present my report on Week 9.