VISCERAL@ISBI 2015

VISCERAL Anatomy3 Organ Segmentation Challenge

co-located with IEEE International Symposium on Biomedical Imaging 2015 New York, NY, USA, April 16, 2015

Proceedings



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Preface

VISCERAL (Visual Concept Extraction Challenge in Radiology) aims to organize series of benchmarks on the processing of large-scale 3D radiology images, by using an innovative cloud-based evaluation approach.

While a growing number of benchmark studies compare the performance of algorithms for automated organ segmentation in images with restricted field of views, emphasis on anatomical segmentation in images with wide field-of-view (e.g. showing entire abdomen, trunk, or the whole body) has been limited. VISCERAL Anatomy benchmark series aim to address this need by providing a common image and test dataset and corresponding segmentation challenges for a wide range of anatomical structures and image modalities. This proceedings summarize the techniques submitted for Anatomy³ benchmark, the results of which were also presented at the ISBI VISCERAL Challenge session on April 16th 2014, as part of the IEEE International Symposium on Biomedical Imaging (ISBI) in New York, NY, USA.

The challenge participants used an online evaluation system, where they submitted their algorithms in a virtual machine environment. The organisers then run the virtual machines on the test images and populated the segmentation results in a participant viewable results board. Then, the participants could at their discretion upload their results to a public leaderboard. The results from the methods presented here were published in the online leaderboard two weeks before the challenge session.

The short papers in this proceedings were submitted by the participants to describe their specific methodologies used to generate their results. At the session, participants had a chance to present their methods as oral presentations.

We thank the authors for their submissions and the program committee for their hard work.

Proceeding editors On behalf of VISCERAL Consortium

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