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Kidney and Kidney Tumor Segmentation Data

High resolution CT images of kidneys for training machine learning algorithms.

IP Status: Copyrighted

Applications

- Training data (CT images) for machine learning

Technology Overview

Automatic segmentation of renal tumors and surrounding anatomy is a promising tool for addressing limitations (such as high amount of manual work required, subjectivity in assessment) in traditional approach. Segmentation-based assessments, on the other hand, are objective and necessarily well-defined, and automation reduces workload by click of a button. Expanding on the 2019 Kidney Tumor Segmentation Challenge, KiTS21 aims to accelerate the development of reliable tools to address this need, while also serving as a high-quality benchmark for competing approaches to segmentation methods generally.

Researchers at the University of Minnesota have now released training data for machine learning algorithms focused on kidney and kidney tumor automated segmentation for commercial use. This dataset includes CT scan images of 90 patients who underwent partial or radical nephrectomy for suspected renal malignancy. A retrospective review of these cases was conducted to identify all patients who had undergone a contrast-enhanced preoperative CT scan that includes the entirety of all kidneys.

Desired Partnerships

This dataset is now available for download for commercial use. Commercial organizations must purchase the online license using the link provided on the right panel.

Related Links

KiTS21

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