IEEE VIP Cup 2018: Lung Cancer Radiomics-Tumor Region Segmentation

From the challenge web site: https://signalprocessingsociety.org/get-involved/video-image-processing-cup

The volume, variety, and velocity of medical imaging data generated for medical diagnosis are exploding. Interpretation of such large amount of diagnostic images, however, highly depends on the experience of the radiologist can be extremely time-consuming. Referred to as Radiomics, the ability to process such large amounts of data promises to decipher the un-decoded information within medical images; Develop predictive and prognosis models to design personalized diagnosis; Allow comprehensive study of tumor phenotype, and; Assess tissue heterogeneity for diagnosis of different type of cancers. More specifically, Radiomics refers to the process of extracting and analyzing several features (e.g., attenuation, shape, size, and location) from medical images with the ultimate goal of obtaining predictive or prognostic models.Segmentation and prediction are considered as critical steps among different processing tasks within the Radiomics pipeline, and are the focus of this competition. The 2018 VIP-CUP challenge is on segmentation and prediction of Lung Cancer Tumor region via screening Computed Tomography (CT) scans using an updated version of NSCLC-Radiomics data from TCIA. Images from several patients along with the annotations will be provided for training and validation purposes. The evaluation will be performed based on test sets provided closer to the submission deadline.