VIP-CUP Organizers

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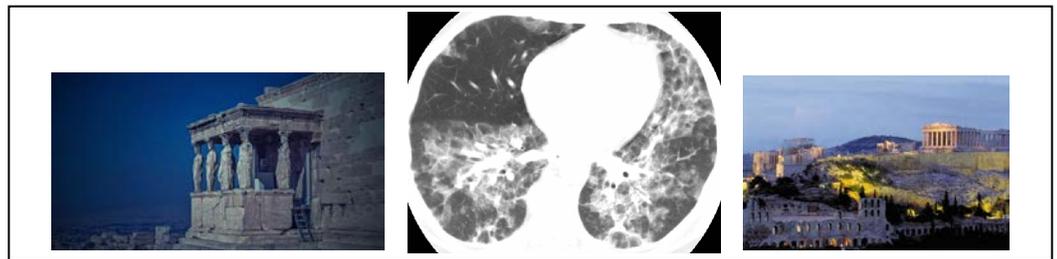**E-mail:**
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Concordia University
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iSIP
Intelligent Signal And Information Processing Lab

IEEE Signal Processing Society ®

CANCER IMAGING ARCHIVE

IEEE ICIP 2018

IEEE Signal Processing Society ®

2018 IEEE VIDEO & IMAGE PROCESSING CUP
2018 VIP-CUP

2018 IEEE International Conference on Image Processing (ICIP), October 7–10, 2018, Athens, Greece
https://users.encs.concordia.ca/~i-sip/2018VIP-Cup/index.html

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. 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.

Prizes:

- The Champion: $5,000
- The 1st Runner-up: $2,500
- The 2nd Runner-up: $1,500

Travel Support to Athens: Each finalist team invited to the ICIP 2018 will receive travel support by the IEEE SPS on a reimbursement basis. A team member is offered up to $1,200 for continental travel, or $1,700 for intercontinental travel. A maximum of 3 members per team will be eligible for travel support.

Eligibility Criteria:

Each team must be composed of: (i) One faculty member (the Supervisor); (ii) At most one graduate student (the Tutor), and; (iii) At least 3 but no more than 10 undergraduates. At least three of the undergraduate team members must be either IEEE Signal Processing Society (SPS) members or SPS student members.

Important Dates

May 24, 2018	Initial Dataset for training and validation will be released.
July 15, 2018	Team registration on IEEE VIP-Cup.
August 14, 2018	Test Data Will be Released
August 26, 2018	Deadline for Submission of VIP-Cup Results together with the Report.
September 8, 2018	2018 VIP-Cup Finalist Teams will be announced.
October 7, 2018	VIP-CUP Final Competition at ICIP 2018

Questions should be directed to Dr. Arash Mohammadi (arash.mohammadi@concordia.ca).