UNIVERSITY OF SOUTH FLORIDA

Defense of a Doctoral Dissertation

Learning to Predict Clinical Outcomes from Soft Tissue Sarcoma MRI

by

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For the Ph.D. degree in Computer Science & Engineering

With a 50% morality rate in the USA, Soft Tissue Sarcomas (STS) are among the most dangerous diseases. Heterogeneous responses to the treatments of the same sub-type of STS as well as intra-tumor heterogeneity make the study of biopsies imprecise. This dissertation provides novel versions of imaging analysis based on Radiomics and Bag of Visual Words integrated with deep features to quantify the heterogeneity of STS tumor. This dissertation does a comprehensive analysis on available data in 2D and 3D to predict the behavior of the STS with regard to clinical outcomes such as recurrence or metastasis and tumor necrosis.

Wednesday, May 24, 2017

10:00 AM

ENB 313

THE PUBLIC IS INVITED

Examining Committee

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