



Biomedical Informatics Grand Rounds



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Deep Topological Learning: Topological Information and Its Usage in Segmentation, Analysis, and Learning

Wednesday, April 29, 2020 3 pm—4 pm

Abstract:

Topological information captures global structural information of complex biomedical systems such as neurons, tumor/immune cells, vessels, etc. In this talk, we present several recent works on how to combine the topological information with learning to achieve high quality segmentation and analysis of neurons and tumor microenvironment. We also discuss other related learning tools we have developed, such as graph convolutional neural networks, that can be potentially used in advanced spatial analysis of tumor cellular architecture.

Bio:

Chao Chen is an assistant professor in the department of biomedical informatics. He is interested in developing advanced learning methods that use topological and geometric information to analyze biomedical imaging data.

Remote Access

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