先端科学技術研究科　修士論文要旨

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要旨

Invisibility is the main challenge of diagnosis that there are usually no symptoms of Pancreatic carcinoma (Pc) at the early stage. Therefore, the early and accurate identification of Pc is crucial which is expected to capture the imperceptible region of interest of pathological images (PIs) to support diagnosis and further treatment. This paper presents an attempt at a straightforward clustering autoencoder framework for the Pc identification alternative. With merging the Marginal Entropy and Conditional Entropy into the framework, the proposed method shows promise of clustering (optimal cluster is 20) experimenting with an authoritative PIs dataset of Pc. Meanwhile, we design a tool used for tracking the attention of clustering decisions, to provide a certain interpretability for the clinical diagnosis. The proposed method is a plain but potential framework that can be used in the further development of complex deep architecture for more accurate cancer-related research.