



Medical Imaging meets Deep Learning

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Deep Learning + Knowledge: Medical Image Recognition, Segmentation and Parsing

The "Machine learning + Knowledge" approaches, which combine machine learning with domain knowledge, enable us to achieve start-of-the-art performances for many tasks of medical image recognition, segmentation and parsing. In this talk, we first present real success stories of such approaches. Then, we proceed to elaborate deep learning, a special, mighty type of machine learning method, and its use in medical imaging. We conjecture that deep learning approaches, when fused with knowledge, often achieve better performance than those without knowledge fusion.