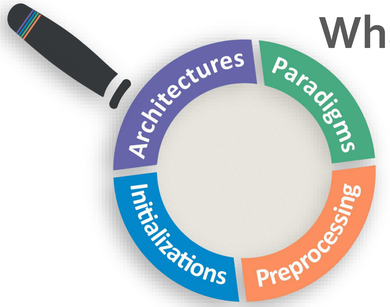
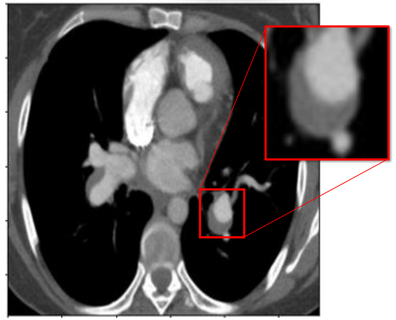
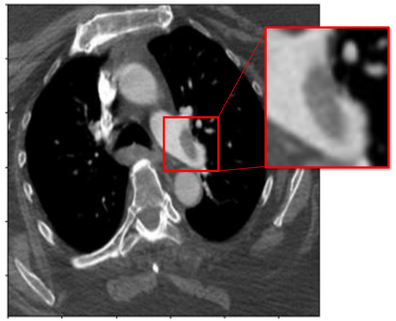
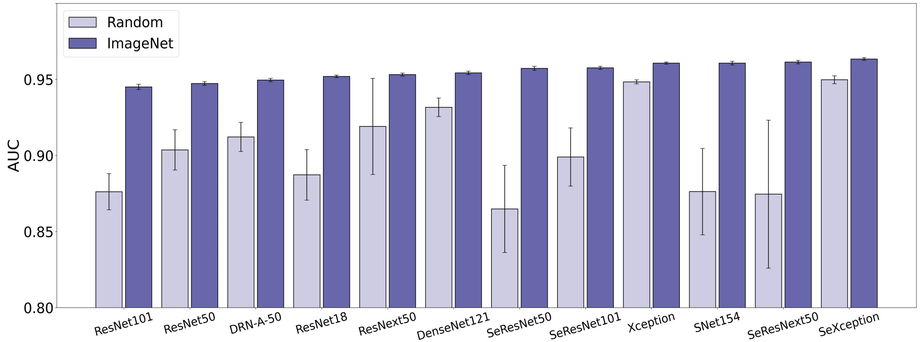
What deep learning architectures, model initializations, learning paradigms, and data preprocessing should be used for computer-aided diagnosis of pulmonary embolism?



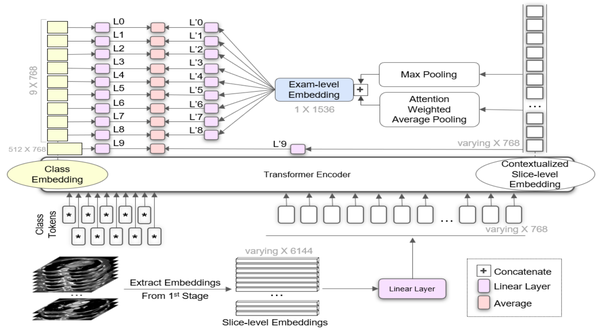


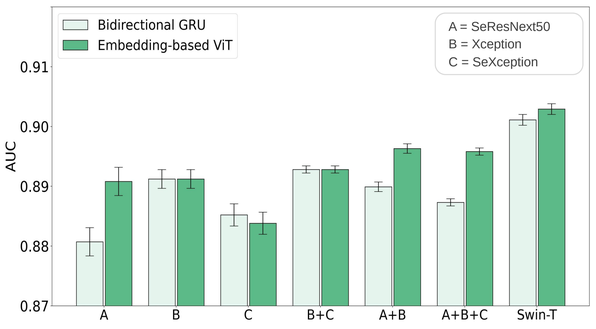


Transfer learning consistently improves performance across the 12 different CNN architectures

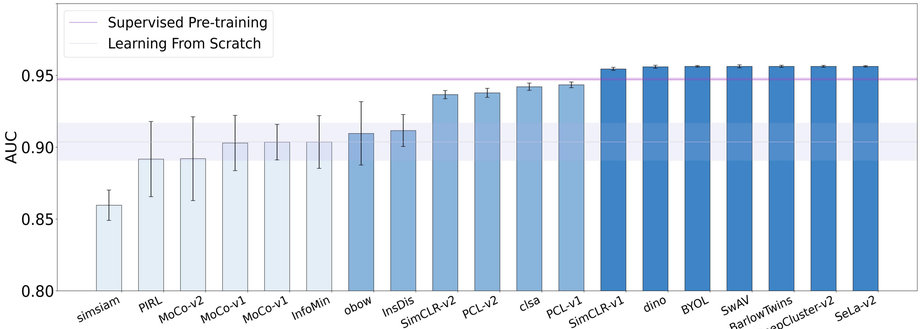


Proposed Embedding-based ViT utilizes class and exam-level embeddings from Transformer encoder, and marginally outperforms bidirectional GRU

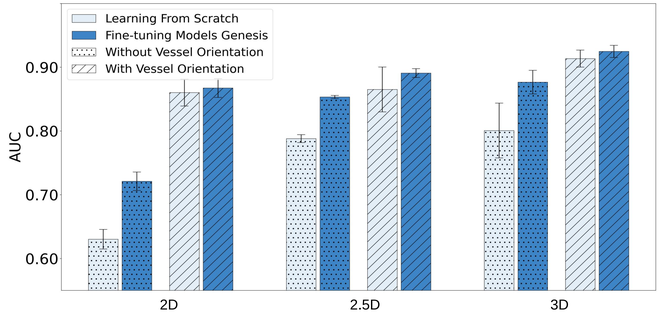




Self-supervised pre-training overtakes (fully) supervised pre-training



Models Genesis enhances performance across image representations and dimensions



Orienting vessels and increasing image dimensions boost performance