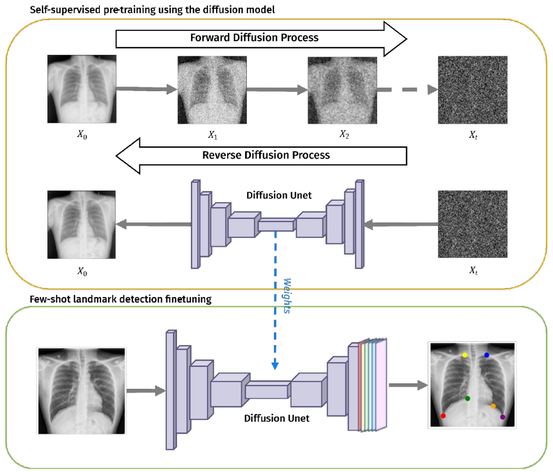
Self-Supervised Pre-Training with Diffusion Model for Few-Shot Landmark Detection in X-Ray Images

Introduction

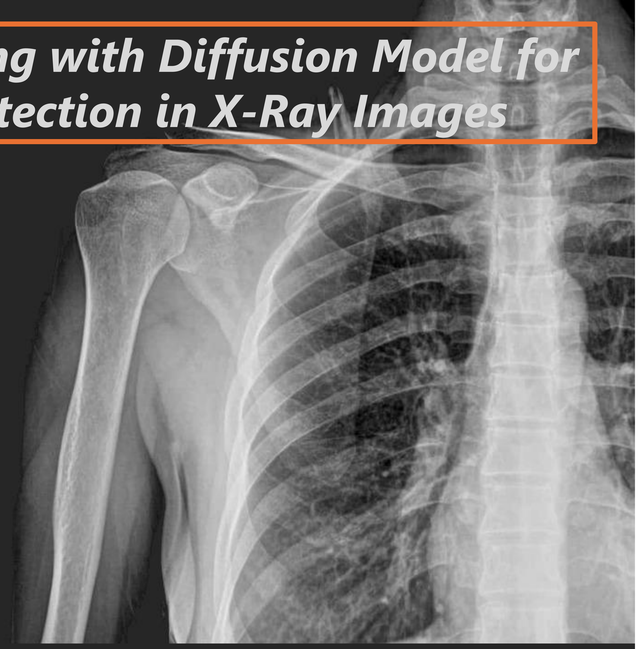
Medical ***landmark detection*** faces challenges due to ***limited annotated datasets***. We pioneer the use of ***diffusion models*** for this task, employing ***self-supervised pre-training*** from unannotated data.

Method



Take-Home Message

Our approach achieves ***state-of-the-art results*** in landmark detection, demonstrating exceptional performance ***in few-shot settings*** and significantly ***reducing the need for large annotated datasets***.



Diffusion Models Enable Accurate Landmark Detection in X-rays with Minimal Data

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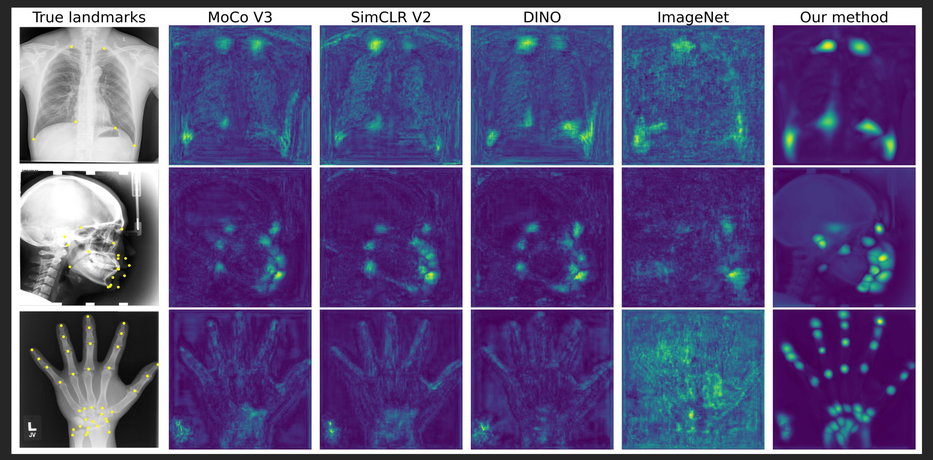

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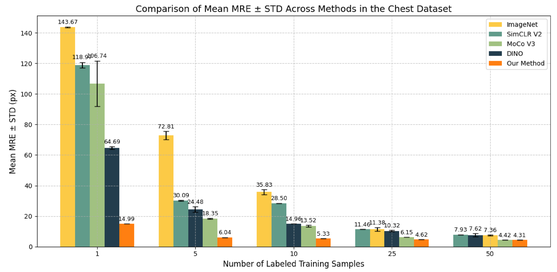
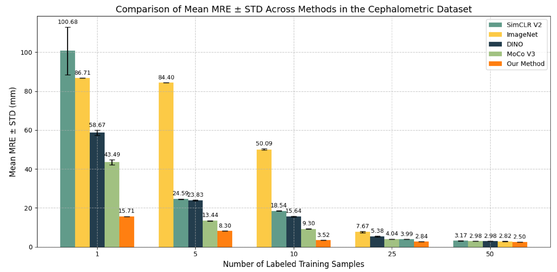
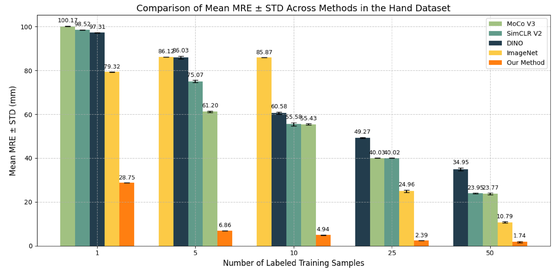
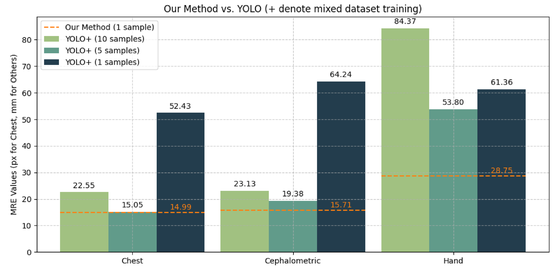
Results









Zhu et al., You only learn once: Universal anatomical landmark detection, 2021