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Nota di contenuto	Intro -- Preface -- Organization -- Contents -- Image Synthesis-Based Late Stage Cancer Augmentation and Semi-supervised Segmentation for MRI Rectal Cancer Staging -- 1 Introduction -- 2 Methodology -- 2.1 Semi Supervised Learning with T-staging Loss -- 2.2 Generating Advanced Cancer MRI Image from Labels -- 3 Experiments and Results -- 3.1 Dataset -- 3.2 Implementation Details and Evaluation Metrics -- 3.3 Results -- 4 Discussion -- 5 Conclusions -- References -- DeepEdit: Deep Editable Learning for Interactive Segmentation of 3D Medical Images -- 1 Introduction -- 2 Proposed Method -- 2.1 User Interaction and Simulated Clicks -- 2.2 Training DeepEdit -- 3 Experimental Results -- 3.1 Prostate Segmentation Tasks -- 3.2 Abdominal Organ Segmentation -- 4 Conclusion -- References -- Long-Tailed Classification of Thorax Diseases on Chest X-Ray: A New Benchmark Study -- 1 Introduction -- 2 Long-Tailed Classification of Thorax Diseases -- 2.1 Task Definition -- 2.2 Dataset Construction -- 2.3 Methods for Benchmarking -- 2.4 Experiments and Evaluation -- 3 Results and Analysis -- 4 Discussion and Conclusion -- References -- Lesser of Two Evils Improves Learning in the Context of Cortical Thickness Estimation Models - Choose Wisely -- 1 Introduction -- 2 Methods -- 3 Experiments and Results -- 4 Conclusion -- References

-- TAAL: Test-Time Augmentation for Active Learning in Medical Image Segmentation -- 1 Introduction -- 2 Method -- 3 Experiments and Results -- 3.1 Implementation Details -- 3.2 Active Learning Setup -- 3.3 Comparison of Active Learning Strategies -- 4 Conclusion -- References -- Disentangling a Single MR Modality -- 1 Introduction -- 2 Method -- 2.1 The Single-Modal Disentangling Network -- 2.2 A New Metric to Evaluate Disentanglement -- 3 Experiments and Results -- 4 Discussion and Conclusion -- References.

CTooth+: A Large-Scale Dental Cone Beam Computed Tomography Dataset and Benchmark for Tooth Volume Segmentation -- 1 Introduction -- 2 CTooth+ Dataset -- 2.1 Dataset Summary -- 2.2 Expert Annotation and Quality Assessment -- 2.3 Potential Research Topics -- 3 Experiments and Results -- 3.1 Evaluation Metrics and Implementations on the CTooth+ -- 3.2 Benchmark for Fully-Supervised Tooth Volume Segmentation -- 3.3 Benchmark for Semi-supervised Tooth Volume Segmentation -- 3.4 Benchmark for Active Learning Based Tooth Volume Segmentation -- 4 Conclusion -- References -- Noisy Label Classification Using Label Noise Selection with Test-Time Augmentation Cross-Entropy and NoiseMix Learning -- 1 Introduction -- 2 Methods -- 2.1 Label Noise Selection with Test-Time Augmentation Cross-Entropy -- 2.2 Classifier Training with NoiseMix -- 3 Experiments and Results -- 3.1 Datasets and Experimental Details -- 3.2 Results -- 4 Conclusions -- References -- CSGAN: Synthesis-Aided Brain MRI Segmentation on 6-Month Infants -- 1 Introduction -- 2 Method -- 2.1 6-Month-Like MR Data Synthesis -- 2.2 6-month-like MR Data Segmentation -- 3 Experiments and Results -- 3.1 Datasets -- 3.2 Implement Details -- 3.3 Results -- 4 Conclusion -- References -- A Stratified Cascaded Approach for Brain Tumor Segmentation with the Aid of Multi-modal Synthetic Data -- 1 Introduction -- 2 Methods -- 2.1 Stratified Conditional GANs for Brain Tumor Image Synthesis -- 2.2 Whole Tumor Detection -- 2.3 Brain Tumor Grade Classification -- 2.4 Fine-Grained Brain Tumor Region Segmentation -- 3 Results and Discussion -- 3.1 Material -- 3.2 Experimental Setup -- 3.3 Evaluation -- 4 Conclusion and Future Work -- References -- Efficient Medical Image Assessment via Self-supervised Learning -- 1 Introduction -- 2 Preliminaries -- 2.1 Supervised-Learning-Based Data Assessment. 2.2 Formulation of Unsupervised-Learning-Based Data Assessment -- 3 Our Method -- 3.1 Theoretical Implication -- 3.2 Data Assessment on Singular Value -- 3.3 Forming Embedding Space Using Masked Auto-encoding -- 4 Experiment -- 4.1 Experiment Setup and Dataset -- 4.2 Proof of Concept with 'Ground-Truth' -- 4.3 Comparison with Alternative Embedding Methods -- 4.4 Comparison with Baseline Data Valuation Methods -- 5 Discussion and Conclusion -- References -- Few-Shot Learning Geometric Ensemble for Multi-label Classification of Chest X-Rays -- 1 Introduction -- 2 Methods -- 3 Experiments -- 3.1 Dataset -- 3.2 Baselines -- 3.3 Implementation Details -- 3.4 Results and Evaluation -- 4 Conclusion -- References -- Author Index.
