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Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics, , 3004-9954 ; ; 12967
Disciplina	616.07543
Soggetti	Image processing - Digital techniques Computer vision Artificial intelligence Bioinformatics Computer Imaging, Vision, Pattern Recognition and Graphics Artificial Intelligence Computational and Systems Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Automatic ultrasound vessel segmentation with deep spatiotemporal context learning -- Multimodal continual learning with sonographer eye-tracking in fetal ultrasound -- Development and evaluation of intraoperative ultrasound segmentation with negative image frames and multiple observer labels -- Automatic tomographic ultrasound imaging sequence extraction of the anal sphincter -- Lung Ultrasound Segmentation and Adaptation between COVID-19 and Community-Acquired Pneumonia -- An Efficient Tracker for Thyroid Nodule Detection and Tracking during Ultrasound Scanning -- TransBridge: A lightweight transformer for left ventricle segmentation in echocardiography -- Adversarial Affine Registration for Real-time Intraoperative Registration of 3-D US-US for Brain Shift Correction -- Robust ultrasound-to-ultrasound registration for intra-operative brain

shift correction with a Siamese neural network -- Pose Estimation of 2D Ultrasound Probe from Ultrasound Image Sequences Using CNN and RNN -- Evaluation of low-cost hardware alternatives for 3D freehand ultrasound reconstruction in image-guided neurosurgery -- Application potential of robot-guided ultrasound during CT-guided interventions -- Towards Scale and Position Invariant Task Classification using Normalised Visual Scanpaths in Clinical Fetal Ultrasound -- Efficient Echocardiogram View Classification with Sampling-Free Uncertainty Estimation -- Contrastive Learning for View Classification of Echocardiograms -- Imaging Biomarker Knowledge Transfer for Attention-based Diagnosis of COVID-19 in Lung Ultrasound Videos -- Endoscopic ultrasound image synthesis using a cycle-consistent adversarial network -- Realistic Ultrasound Image Synthesis for Improved Classification of Liver Disease -- Adaptable image quality assessment using meta-reinforcement learning of task amenability -- Deep Video Networks for Automatic Assessment of Aortic Stenosis in Echocardiography -- Pruning MobileNetV2 for Efficient Implementation of Minimum Variance Beamforming -- Automatic fetal gestational age estimation from first trimester scans.

Sommario/riassunto

This book constitutes the proceedings of the Second International Workshop on Advances in Simplifying Medical UltraSound, ASMUS 2021, held on September 27, 2021, in conjunction with MICCAI 2021, the 24th International Conference on Medical Image Computing and Computer-Assisted Intervention. The conference was planned to take place in Strasbourg, France, but changed to an online event due to the Coronavirus pandemic. The 22 papers presented in this book were carefully reviewed and selected from 30 submissions. They were organized in topical sections as follows: segmentation and detection; registration, guidance and robotics; classification and image synthesis; and quality assessment and quantitative imaging.