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Collana	Computer Communication Networks and Telecommunications, , 2945-9184 ; ; 10734
Disciplina	616.70754
Soggetti	Computer vision Artificial intelligence Computer networks Computer Vision Artificial Intelligence Computer Communication Networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Localization of Bone Surfaces from Ultrasound Data Using Local Phase Information and Signal Transmission Maps -- Shape-aware Deep Convolutional Neural Network for Vertebrae Segmentation -- Automated Characterization of Body Composition and Frailty with Clinically Acquired CT -- Unfolded cylindrical projection for rib fracture diagnosis -- 3D Cobb Angle Measurements from Scoliotic Mesh Models with Varying Face-Vertex Density -- Automatic Localization of the Lumbar Vertebral Landmarks in CT Images with Context Features -- Joint Multimodal Segmentation of Clinical CT and MR from Hip Arthroplasty Patients -- Reconstruction of 3D muscle fiber structure using high resolution cryosectioned volume -- Segmentation of Pathological Spines in CT Images Using a Two-Way CNN and a

Collision-Based Model -- Attention-driven deep learning for pathological spine segmentation -- Automatic Full Femur Segmentation from Computed Tomography Datasets using an Atlas-Based Approach -- Classification of Osteoporotic Vertebral Fractures using Shape and Appearance Modelling -- DSMS-FCN: A Deeply Supervised Multi-Scale Fully Convolutional Network for Automatic Segmentation of Intervertebral Disc in 3D MR Images.

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#### Sommario/riassunto

This book constitutes the refereed proceedings of the 5th International Workshop and Challenge on Computational Methods and Clinical Applications for Musculoskeletal Imaging, MSKI 2017, held in conjunction with MICCAI 2017, in Quebec City, QC, Canada, in September 2017. The 13 workshop papers were carefully reviewed and selected for inclusion in this volume. Topics of interest include all major aspects of musculoskeletal imaging, for example: clinical applications of musculoskeletal computational imaging; computer-aided detection and diagnosis of conditions of the bones, muscles and joints; image-guided musculoskeletal surgery and interventions; image-based assessment and monitoring of surgical and pharmacological treatment; segmentation, registration, detection, localization and visualization of the musculoskeletal anatomy; statistical and geometrical modeling of the musculoskeletal shape and appearance; image-based microstructural characterization of musculoskeletal tissue; novel techniques for musculoskeletal imaging.

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