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Nota di contenuto	Machine Learning for Dental Imaging: Machine Learning for CBCT Segmentation of Craniofacial 3D Image -- Machine Learning for Automatic Landmark Detection of 3D Imaging -- Machine Learning for Generating Dental CT from Magnetic Resonance Imaging (MRI) -- Machine Learning for 2D Dynamic Facial Photographs. Machine Learning for Oral Diagnosis and Treatment: Machine Learning for Orthodontic Diagnosis and Treatment Planning -- Machine Learning for Diagnosis of Periodontal Diseases -- Machine Learning for Oral Microbiome -- Machine Learning for Characterization of Craniofacial Anomaly -- Machine Learning for Orthognathic Surgery -- Machine Learning for Bone Tissue Engineering. Machine Learning and Dental Designs: Machine Learning for Orthodontic CAD/CAM Technologies -- Machine Learning for Design of Dental Implants -- Machine Learning for Optimization of Dental Material Processing. Machine Learning Supporting Dental Research: Machine Learningfor Data Mining in Teledentistry -- Machine Learning for Evidence-Based Literature Search -- Machine Learning in Genetics and Genomics -- Machine Learning and Finite Element Modeling.
Sommario/riassunto	This book reviews all aspects of the use of machine learning in contemporary dentistry, clearly explaining its significance for dental imaging, oral diagnosis and treatment, dental designs, and dental

research. Machine learning is an emerging field of artificial intelligence research and practice in which computer agents are employed to improve perception, cognition, and action based on their ability to “learn”, for example through use of big data techniques. Its application within dentistry is designed to promote personalized and precision patient care, with enhancement of diagnosis and treatment planning. In this book, readers will find up-to-date information on different machine learning tools and their applicability in various dental specialties. The selected examples amply illustrate the opportunities to employ a machine learning approach within dentistry while also serving to highlight the associated challenges. Machine Learning in Dentistry will be of value for all dental practitioners and researchers who wish to learn more about the potential benefits of using machine learning techniques in their work.