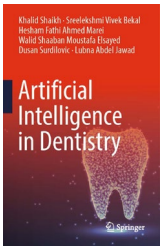
BOOK REVIEW



ARTIFICIAL INTELLIGENCE IN DENTISTRY

Khalid Shaikh, Sreelekshmi Vivek Bekal, Hesham Fathi *et al.*;
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As dentistry moves forward, artificial intelligence (AI) has the capacity to serve as a cornerstone, offering remarkable opportunities for significantly improving disease diagnosis and treatment procedures. *Artificial intelligence in dentistry* is a book written by a team of respected professionals, which delves into the fusion between dentistry and AI, offering valuable viewpoints on the successful integration of AI into the field of oral healthcare. Specifically targeting oral health practitioners and researchers, the book features organised chapters and up-to-date references, making its structure easily navigable.

The book establishes a strong basis for dentistry, covering its history, evolution, and specialties, while also introducing dental anatomy, nomenclature, and developmental disturbances in the first two chapters to ensure a solid comprehension of fundamental concepts before addressing AI topics.

Chapter 3 deals with the prevalent oral health conditions. Indeed, the book's close attention to the supporting role dento-oral health plays in global health security is among its most notable features. Subsequently, chapter 4 looks at the links between oral health and general wellbeing. The importance of early detection and prevention of oral disease is emphasised. The book's holistic approach highlights the critical role of AI in improving dental care globally.

The innovative and advanced technologies that have radically transformed dentistry are discussed thoroughly in chapter 5 of the book. For those seeking to grasp the fundamentals of AI in dental applications, chapter 6 is a valuable resource for understanding AI besides its multiple learning algorithms, including their advantages and disadvantages.

In the following chapters, chapter 7 is a standout section in this edition. It explores the AI application in dento-oral health and imaging, highlighting the effective AI-powered solutions for global health. It lists the various ways in which AI can be used, including dental trauma prevention, the assessment of periodontal risk, prevention of caries and detection of early childhood caries. The concluding chapter presents an example of a multi-class classification algorithm based on x-ray images.

In conclusion, *Artificial intelligence in dentistry* is an indispensable addition to the bookshelf of anyone interested in forthcoming developments in dentistry and the intersection of dentistry with AI.

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