





Jonas Bianchi, DDS, MSc, PhD jbianchi@pacific.edu http://dental.pacific.edu

Course: The Digital Practice: Artificial Intelligence and Technology Integration in Dental Clinics

Course Description:

This one-hour course focuses on how artificial intelligence (AI) is transforming dental clinics. We begin by introducing AI and explaining its importance for dentists. Next, we examine the various applications of AI in dentistry, including its limitations. We'll also discuss how digital tools are enabling dentists to provide better patient care and run their clinics more efficiently. Towards the end, we will consider the important ethical and legal aspects of using AI in dental practices. This course is designed to provide a clear and easily understandable overview of AI in the field of dentistry today.

Educational Objectives:

- 1. Understand AI Basics in Dentistry: Gain a foundational understanding of artificial intelligence and its application in dentistry.
- 2. Explore AI Applications in Dental Practice: Discover how AI is being utilized for diagnostic accuracy, treatment planning, and improving dental care.
- 3. Recognize the Benefits and Limitations of AI for Patient Care: Gain insight into how AI-enhanced digital tools contribute to better patient outcomes and its limitations.

Speaker Bio

Dr. Bianchi is an assistant faculty professor of Orthodontics at the University of the Pacific, Arthur A. Dugoni School of Dentistry. He earned his master's and PhD degrees from the State of Sao Paulo University and completed a postdoctoral fellowship at the University of Michigan. His research focuses on innovative applications of data science, artificial intelligence tools, and advanced 3D imaging assessments. He collaborates with prestigious institutions such as the University of Michigan and the University of North Carolina on NIH-funded projects. In his clinical teaching, Dr. Bianchi employs evidence-based approaches and a wide range of treatment techniques, including segmented mechanics, aligner therapy, straight-wire methods, TADs, 3D printed appliances, and orthopedic appliances.