

National Speaker from Malaysia

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DDS

Title of Lecture

The Future of Digital Dentistry :

Unleashing the Power of Artificial Intelligence in CAD Prosthesis



2010 Doctor of Dental Surgery, Cum Laude
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Summary

Remember those gripping scenes in futuristic sci-fi movies where the hero, wounded and in peril, is miraculously saved by the heroine wielding a high-tech scanner and a life-saving medicine pack? While our reality might not be quite as dramatic, the field of dentistry is experiencing its own transformation, thanks to the remarkable integration of Artificial Intelligence (A.I.) in digital dentistry.

Digital dentistry has emerged as a true game-changer, revolutionizing precision, efficiency, and patient outcomes. The simplicity of fabricating a crown – a process made seamless through the increased use of intraoral scanners and 3D imaging, ushering in a new era of accuracy and efficiency. It's a journey from the physical to the virtual, but hold on tight because A.I. is gearing up to propel us even further.

Tackling Computer-Aided Design (CAD) has often been considered a steep learning curve, but what if we could let A.I. take the reins? Picture this: A.I. effortlessly handles the intricate task of drawing accurate margins and designs the perfect-fit crown within minutes. All you have to do is upload the file, watch the magic unfold, and fine-tune the details with minimal adjustments for perfection.



Excitingly, we've recently witnessed the debut of the first-ever 3D printing ecosystem boasting FDA 510(k) clearance for definitive ceramic-filled resin prosthesis. The best part? This groundbreaking technology enables the production of various dental components, from crowns and onlays to veneers and dentures, at an astonishingly low cost – as little as \$2 per unit, all accomplished in under 20 minutes. And the most recent technology enable us to print full arch in around 30 minutes! Rigorous studies have affirmed the exceptional mechanical performance of ceramic-filled resin, surpassing conventional materials in fracture load, abrasion resistance, and bond strength.



In essence, we've entered an era where high-quality dentistry is not only achievable but also cost-effective and rapid, thanks to the synergistic collaboration of digital dentistry and A.I., The message is clear: Don't be left behind; embrace the future of digital dentistry.