We Claim: (**Font Size 12 Bookman Old Style)**

1. An AI-based dental disease diagnosis system comprising deep learning models such as MobileNetV2 (1.3) for disease detection and U-Net for image segmentation (1.2), which accurately identifies dental conditions from dental X-rays and intraoral images (1.1).

2. An orthodontic treatment simulation system, utilizing a Pix2Pix model consisting of a U-Net Generator for aligning misaligned teeth and a PatchGAN Discriminator (2.2) for realistic image generation (2.4), providing AI-driven treatment simulations to assist in dental planning.

3. The graphical user interface (GUI) as claimed in claims 1 and 2, wherein the GUI enables seamless interaction with the AI-powered dental diagnostic system, allowing patients to upload images, receive AI-driven diagnoses, visualize orthodontic treatment simulations, and schedule remote consultations with specialists.