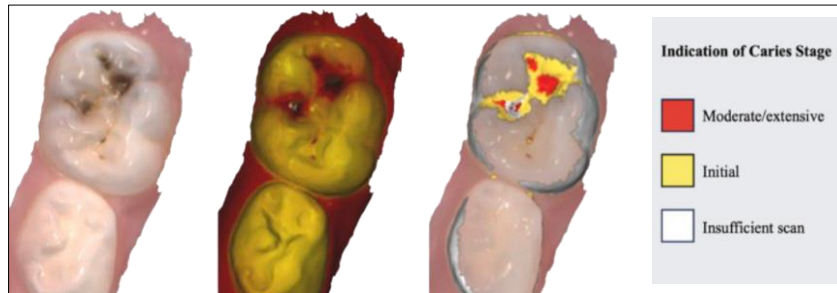


ARTIFICIAL INTELLIGENCE IN CARIES DETECTION: A SECOND OPINION



Each pixel has a degree of gray in two-dimensional X-Ray which represents the object density. An AI algorithm can learn the pattern and give predictions to several dental lesions from this concept.

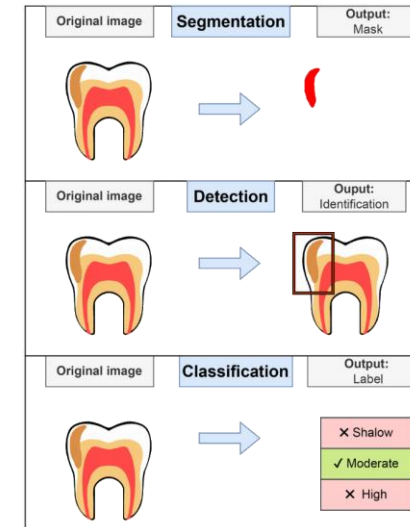
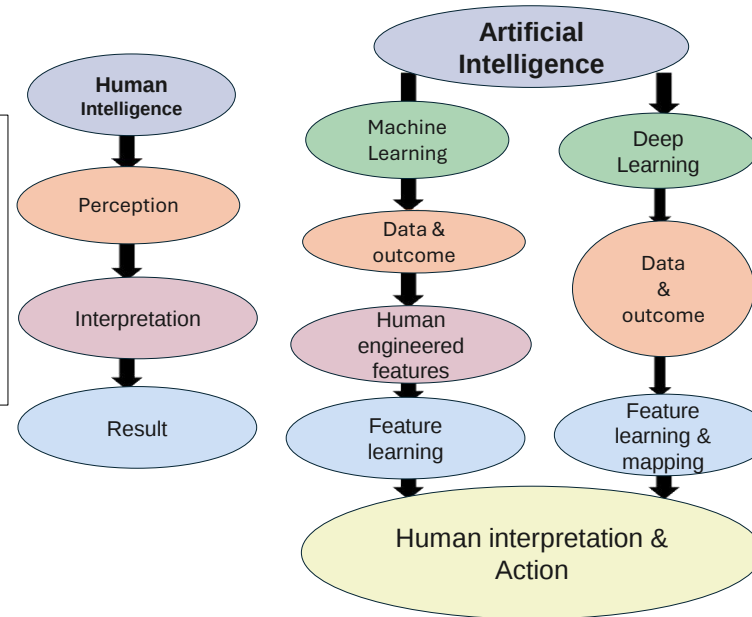
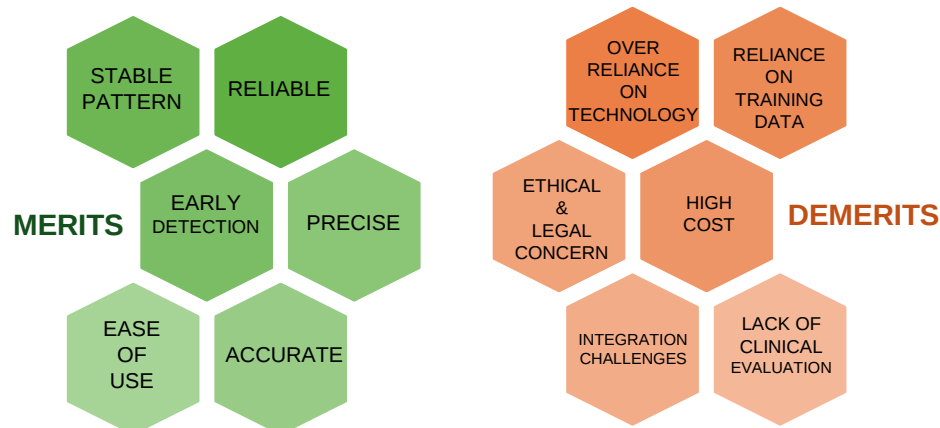


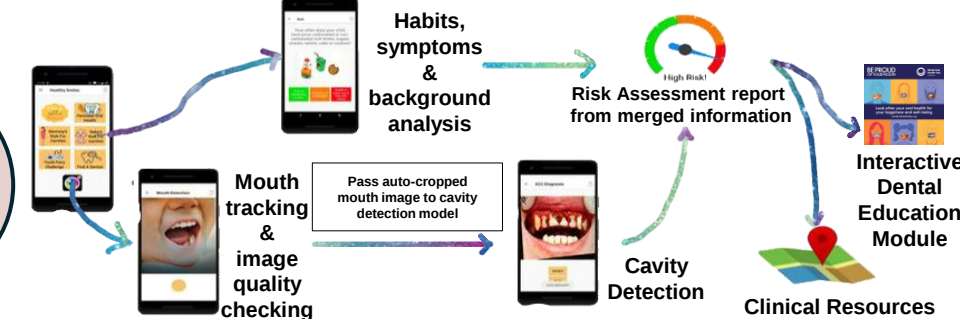
Image classification refers to assigning a categorical label to the entire image (e.g., sound/caries).

Detection refers to determining the area of the outcome.

Segmentation refers to providing the exact outline for the outcome measure and separating it from the rest of the image using pixel-wise annotations.



- ☐ DISEASE DIAGNOSIS
- ☐ TREATMENT PLANNING
- ☐ LANDMARK DETECTION
- ☐ RISK ASSESSMENT



A multistage deep learning-based diagnostic method that employs both analysis of user habits and symptoms and detection results by a cavity detector trained on a large-scale expert-annotated intra oral images.