

#### UNIVERSITI M A L A Y A

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### TECH OFFER

# FIBER OPTIC DISPLACEMENT SENSOR SCANNING SYSTEM FOR IMAGING OF DENTAL CAVITY



# MORE INFORMATION

#### **MEGA-TREND**

- Dental
- Healthcare

#### **TECHNOLOGY READINESS LEVEL (TRL)**

TRL 4

#### **PATENT/ GRANTED NUMBER**

PI 2015700071

# TECHNOLOGY OVERVIEW

The present invention discloses a method for measuring dental cavity diameter by utilizing artificial intelligence technique and fiber optic displacement sensor. The method comprising steps of constructing a fiber optic displacement sensor, FODS scanning and imaging system; acquiring teeth image by using the FODS scanning and imaging system; performing cavity localization process by determining the exact location of the cavity in the teeth image; extracting the first and second features by performing



feature extraction process; performing fuzzy logic on the second feature; and performing classification process on the reflected signals by a single-layer perceptron, SLP network.

#### **CONTACT US!**

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