AI WOMEN'S HEALTH ULTRASOUND

MEDICAL FIELD, OR MEDICAL METHOD

Obstetric ultrasound

TYPE

☑ Decision support ☐ Autonomous decision making

CATEGORY

☐ Prevention ☑ Detection ☐ Diagnosis ☐ Treatment ☐ Other

DESCRIPTION

Following international guidelines published by ISUOG, SonoCNS identifies four standardised planes within a given volume of the foetal head. Following the display of these four planes, SonoCNS will perform five automated measurements (Biparietal Diameter, Head Circumference, Cerebellum, Cisterna Magna, Ventricle), which are used to document the anatomy of the foetal brain.

AIM / PURPOSE

Improve the workflow for the visualisation of clinically-relevant standard planes of the foetal brain, as well as for taking measurements

OUTPUT / RESULTS

SonoCNS permits an 81% reduction in keystrokes compared with the equivalent manual workflow.

AI METHODOLOGY

A combination of convolutional neural networks for segmentation and classification.

INPUT / SIZE OF THE DATA

More than 11,000 images for classification and more than 5,700 images total for segmentation.

REFERENCE DOCUMENTS / LINKS / PUBLICATIONS

http://newsroom.gehealthcare.com/ai-helps-doctors-critical-measurement-during-pregnancy

SOURCE

GE Healthcare

COCIR, the European Coordination Committee of the Radiological, Electromedical and Healthcare IT Industry