MyOCT

Ophtalmologist Image Analysis website supported by Machine Learning Engine

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OVERVIEW

MyOCT is a website made for ophtalmologists that lets them upload retina cuts (OCT scans) and automatically analyzes the images for them. They have access to several features through the website interface as well as all the pertinent data.
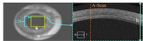

Image taken from IEEE publication: Automated Detection and Measurement of Corneal Haze and Demarcation Line in Spectral-Domain Optical Coherence Tomography Images

Interpreting OCT scans manually is error prone, time consuming and observer dependent. However with the engine used for MyOCT, results have proven to have an accuracy rate of over 99% with an analysis ttime that doesn't exceed a few seconds.

Technology Stack

Java → .NET → Microsoft Azure

OpenCV, WEKA, Microsoft SQL Server

FEATURES

Manage Patients	The doctor can create projects, in which he can add multiple patients	
Upload Image or Video	The dotcor can upload an image or a video to be analyzed for each patient. Videos will be interpreted as a series of images	
Analyse Image	The engine generates all the relevant data, the doctor then has the option to display any of it via a carefully designed user interface	
Generate Statistics	The doctor can view generated graphs using the data retrieved from the uploaded images	
Download pdf report	The doctor has the option to download a pdf report containing the statistics of a patient	