

Insight

AI Eye Analyzer

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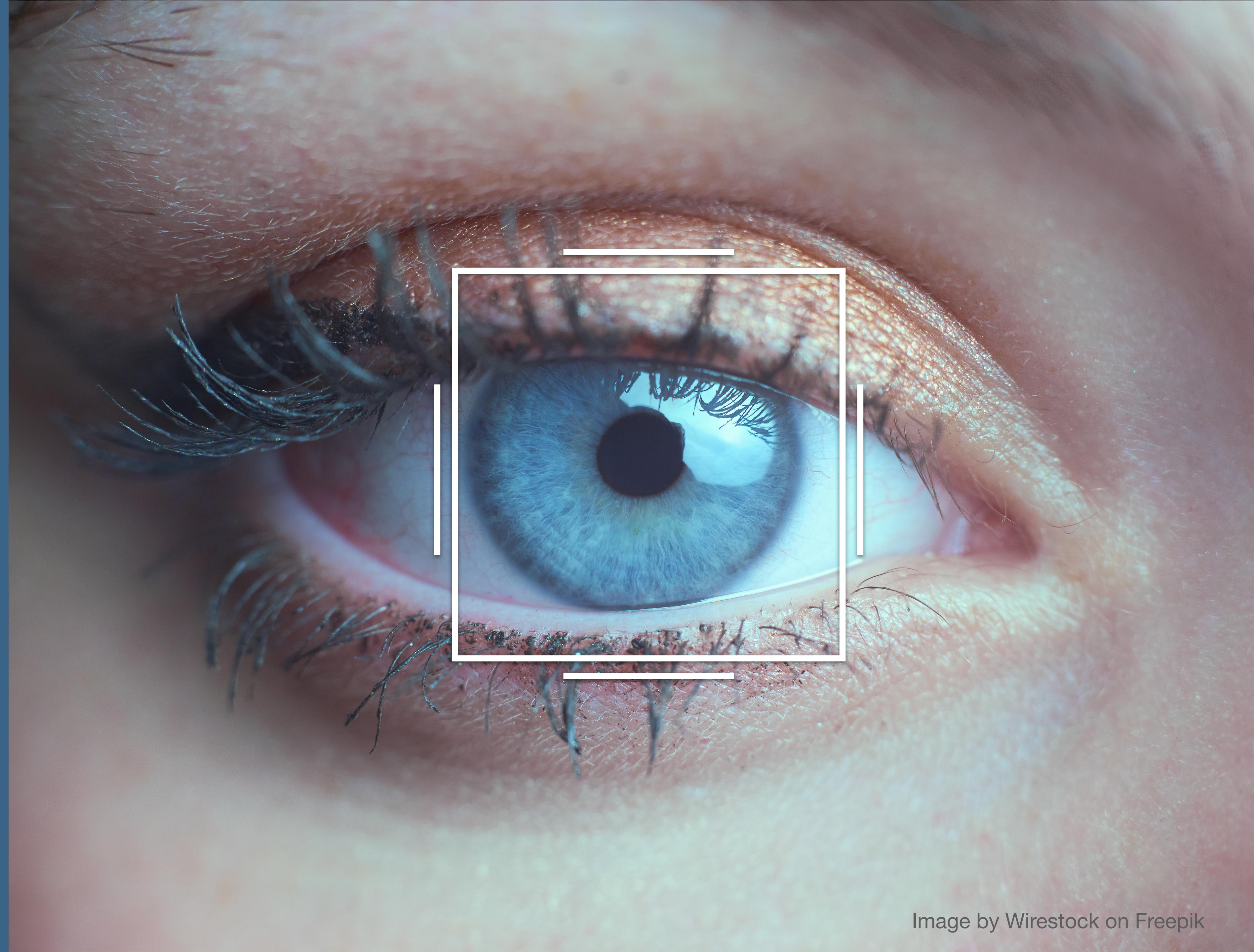
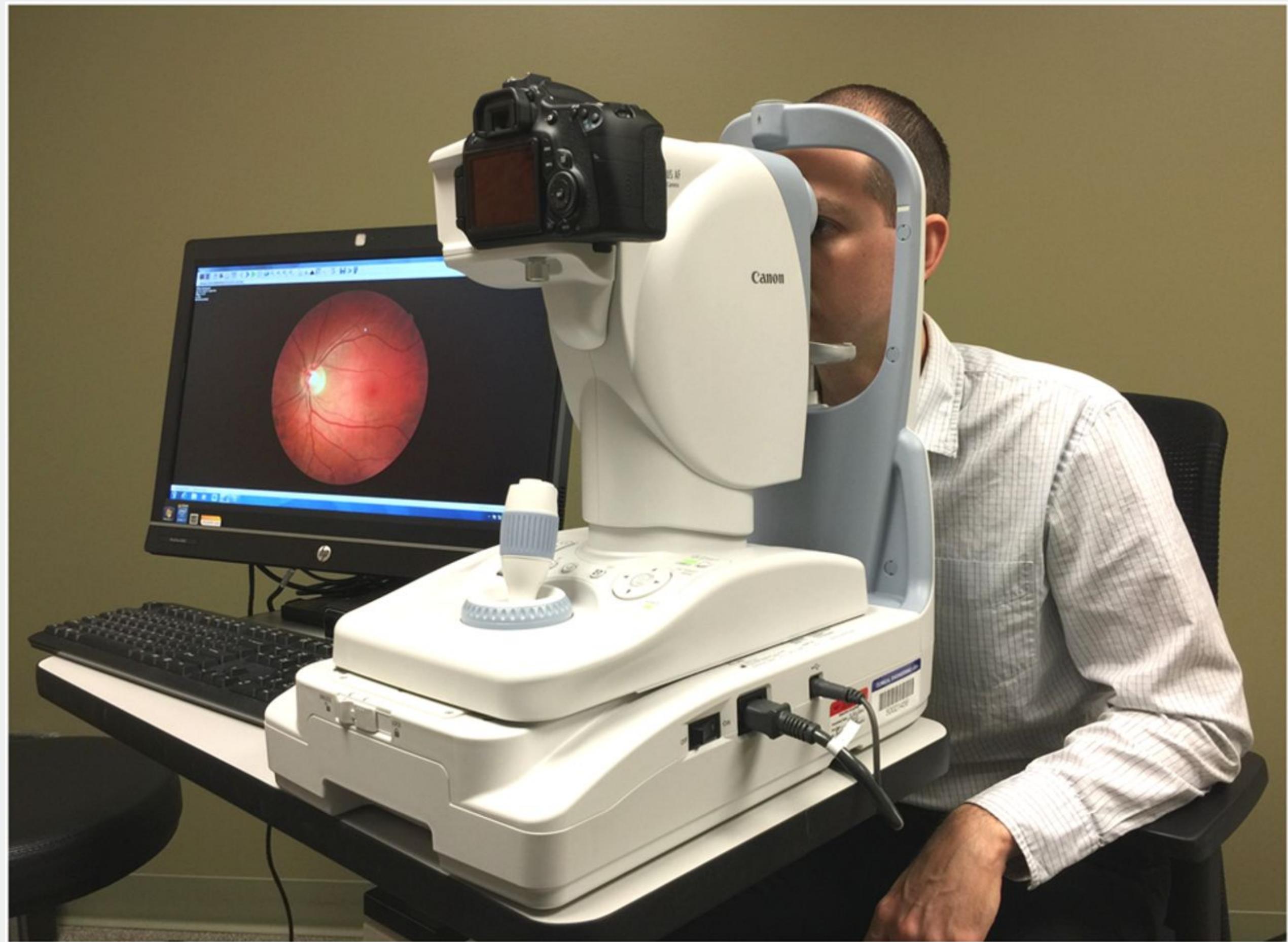
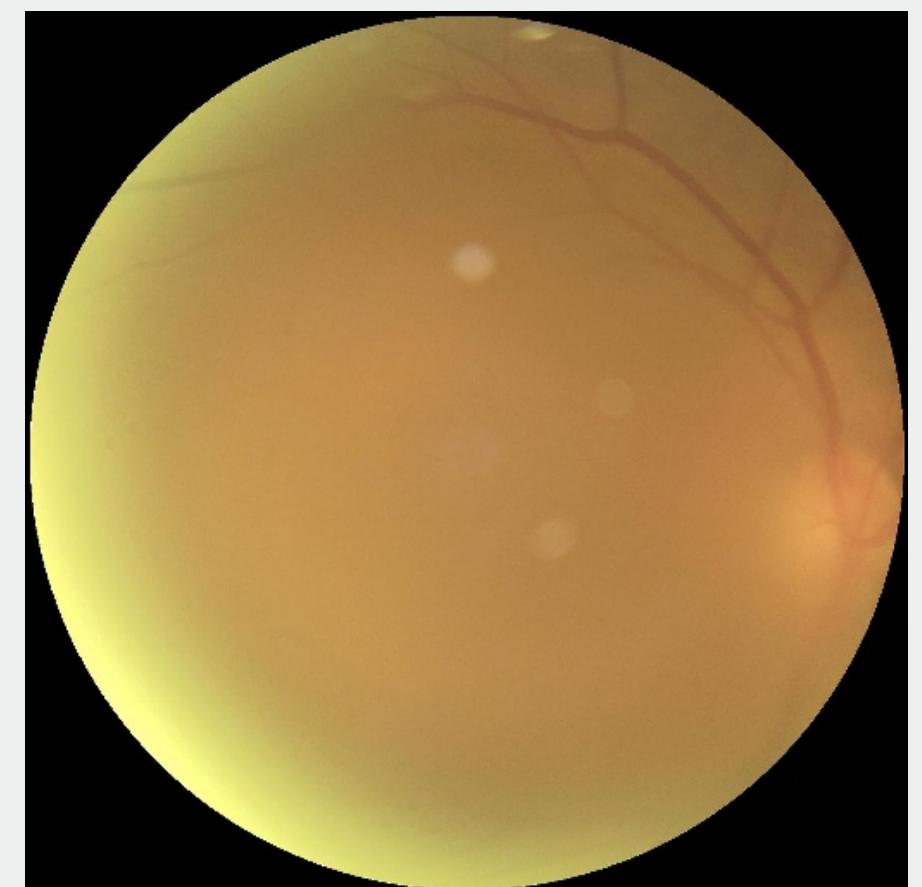


Image by Wirestock on Freepik

Eye Examination



Eye Fundus Images



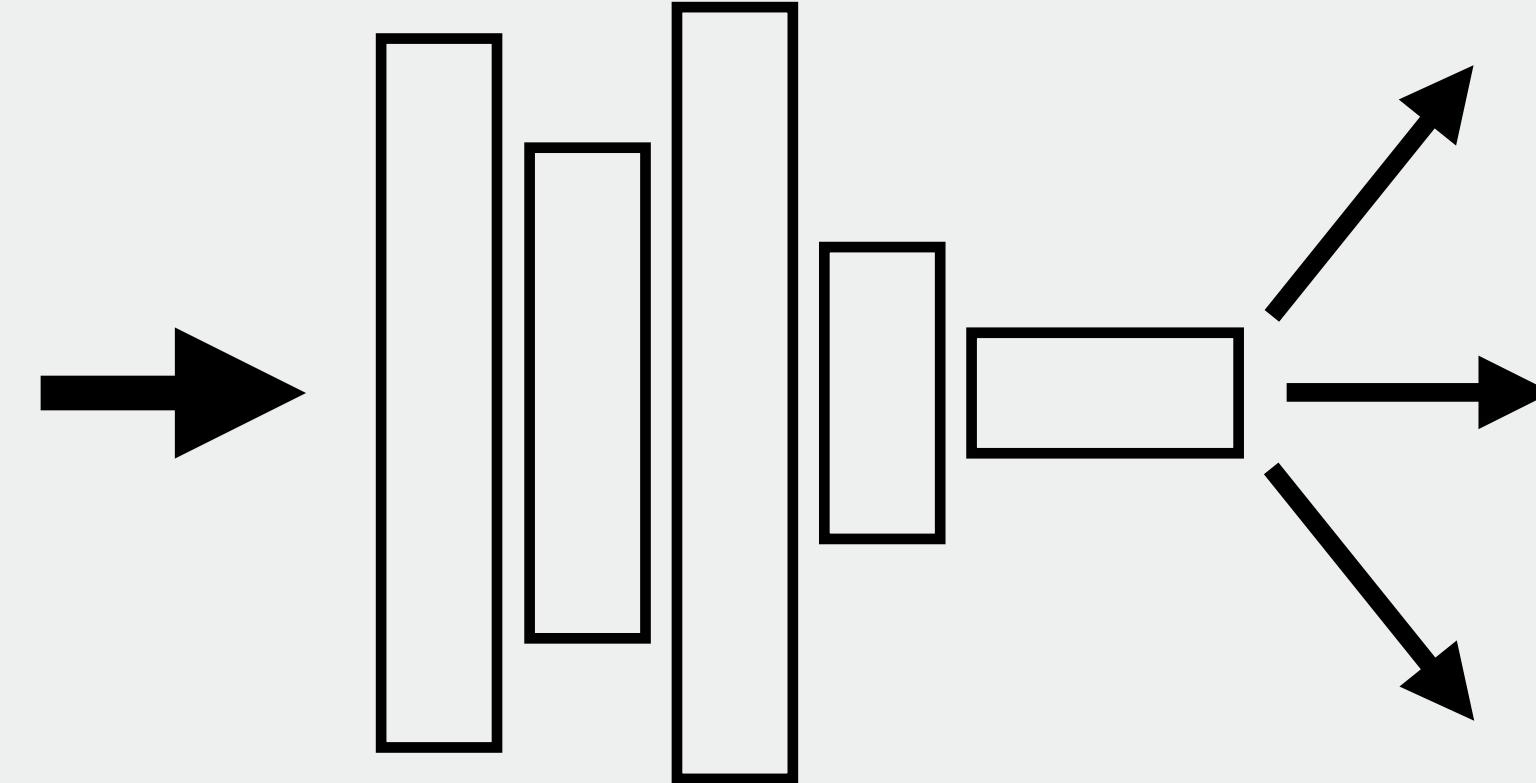
DEMO

switch

Image

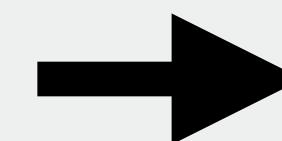


Model



Cataract:
Glaucoma:
Diabetes:

89%
1%
10%

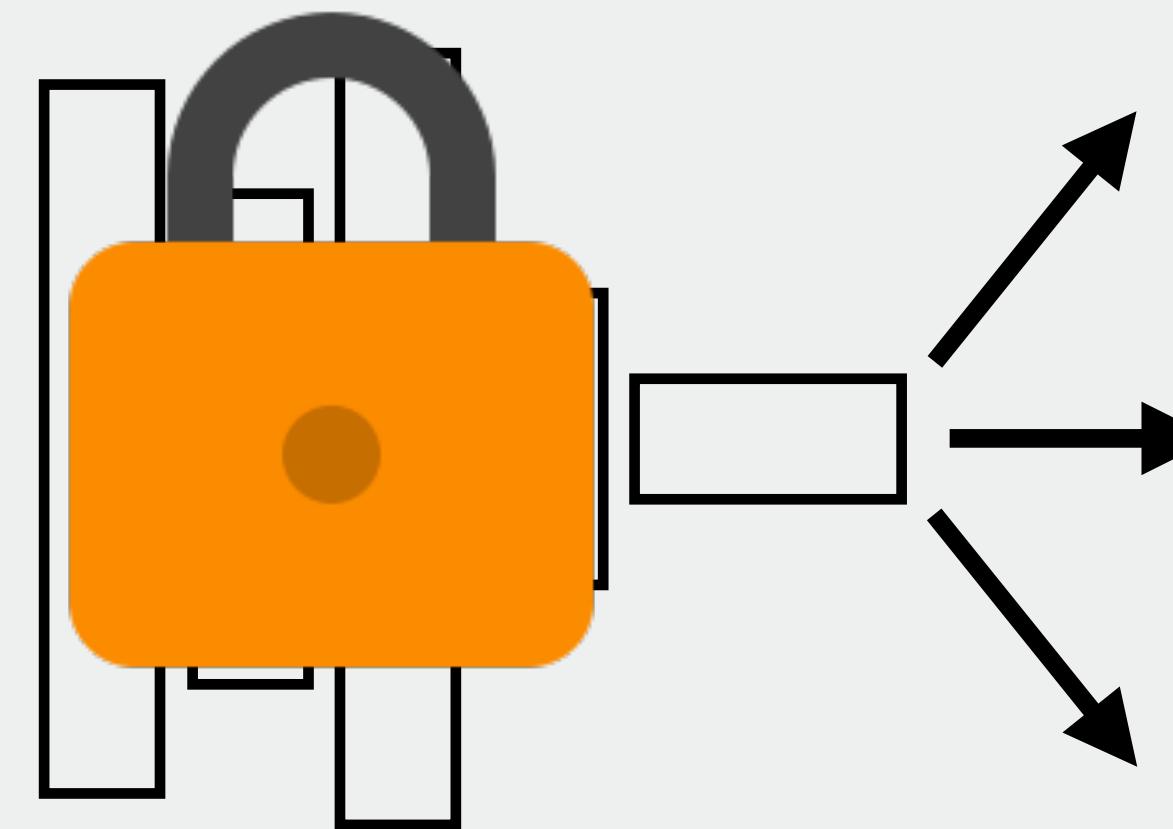


Flask
App

Image



Model



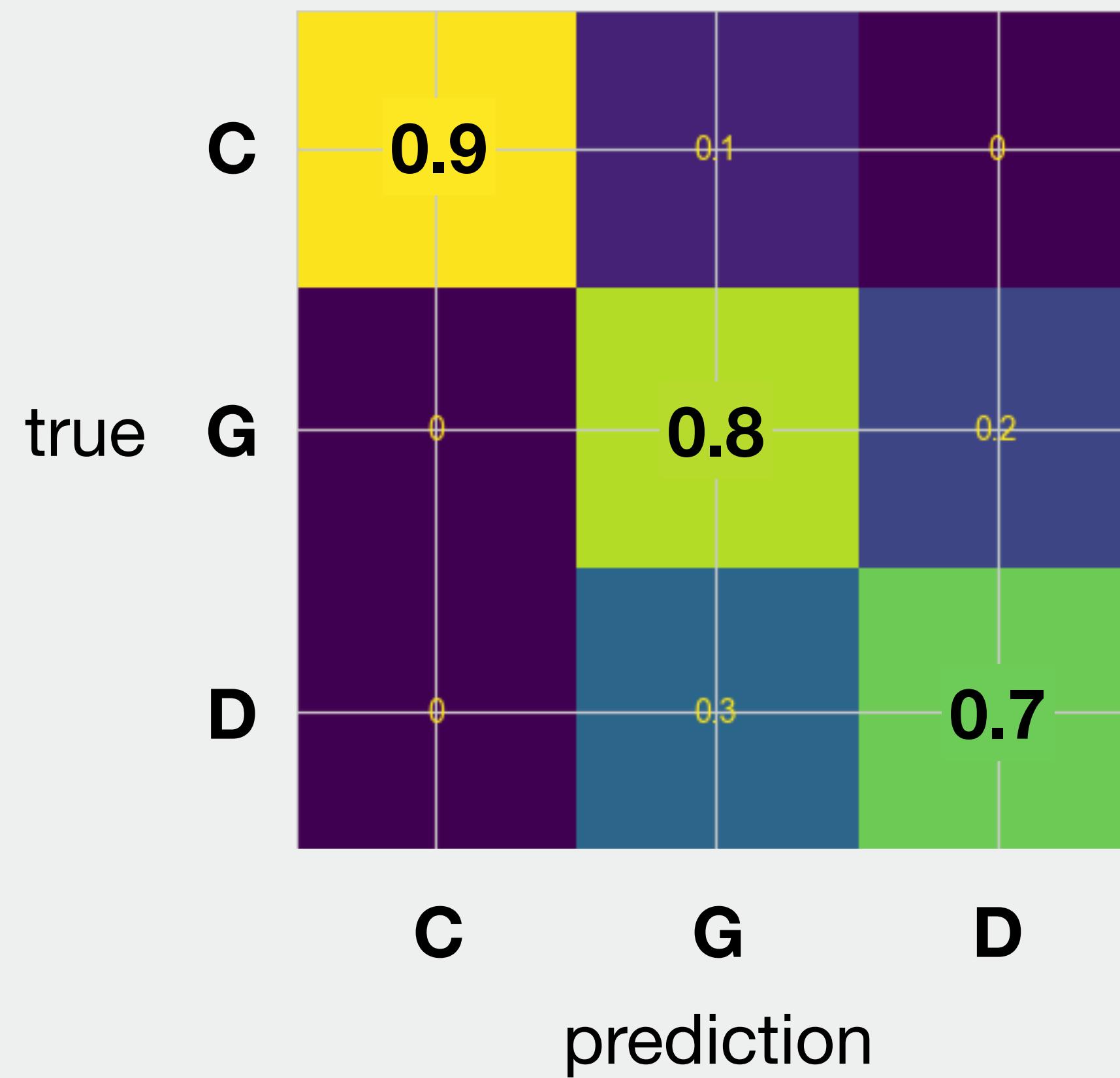
Cataract: 89%
Glaucoma: 1%
Diabetes: 10%

Flask
App

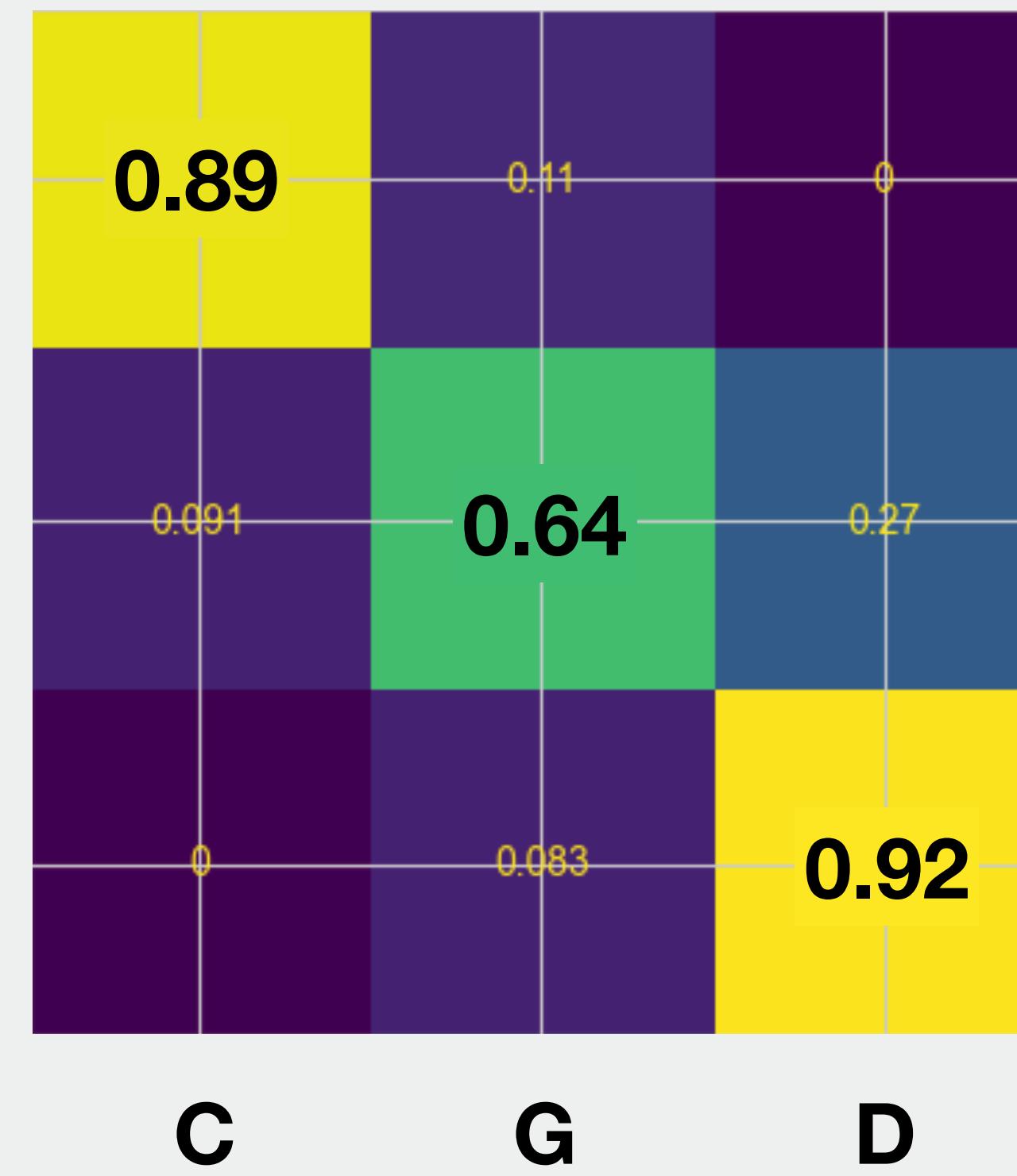
- CNN, transfer-learning
- 3 Models (ResNet50, Inception, VGG16)
- Hyper-Parameter Tuning
- Fine Tuning

→ best Model VGG16

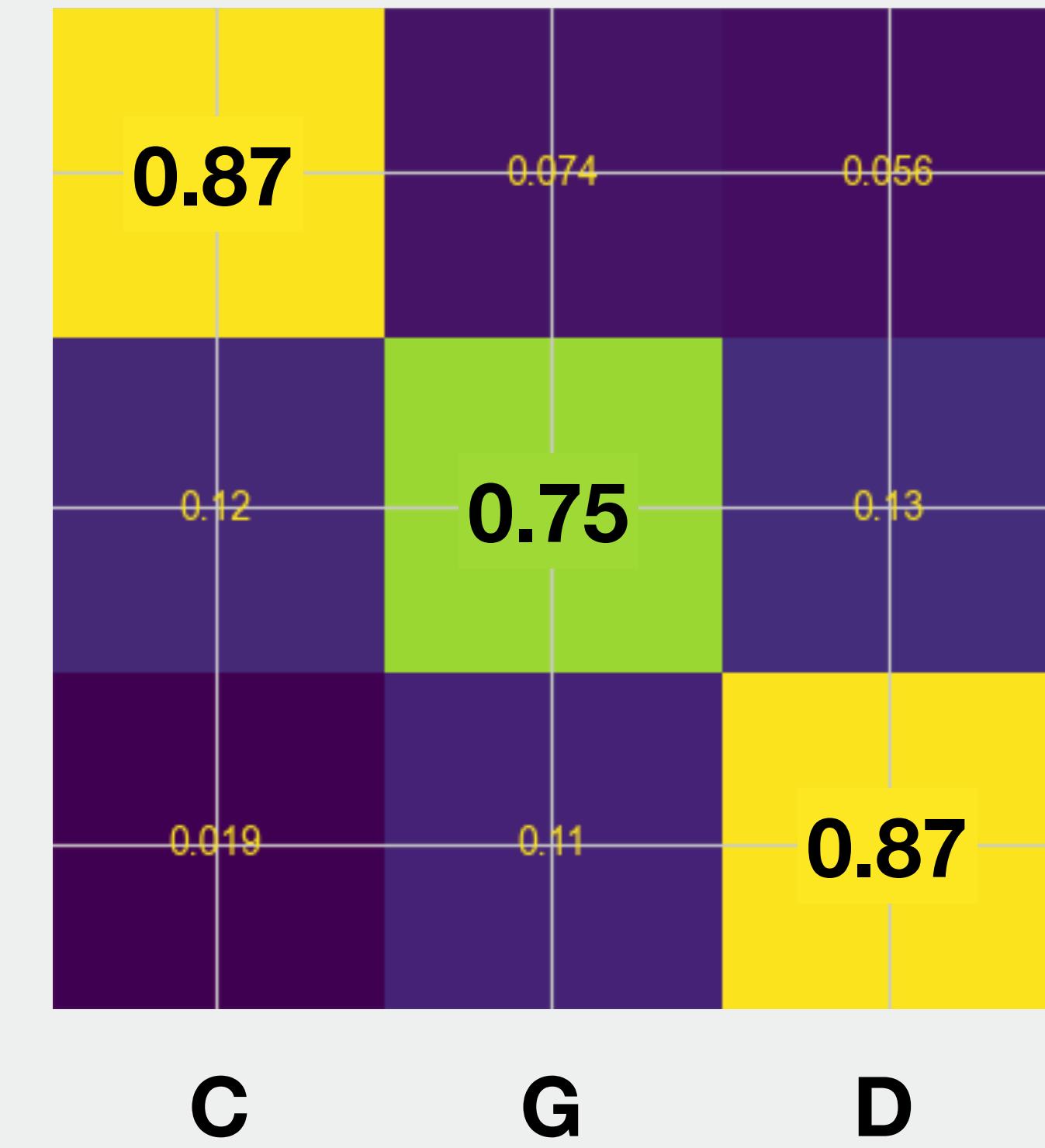
VGG 16



Data augmentation
flipping/rotation of images



Adding Features
sex and age



DEMO

switch

Backup

Eye Analyzer App

Upload an image of a patients eye fundus and press the Analyze button. This tool will check for diabetes, glaucoma and cataract!

Age: Sex:

Choose File

no file selected

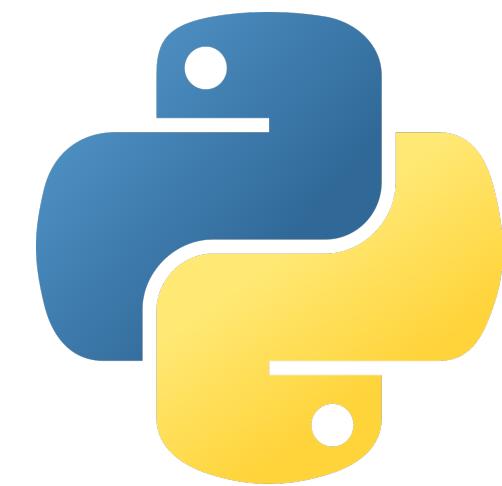
- Female
 Male

Reset

Analyze

© Heike Romanowski 2023 – Eye Analyzer App

Tech Stack



roboflow



TensorFlow



Chart.js



Simple.css - A classless CSS framework

A classless CSS framework that makes semantic HTML look good.