EquiMed

Providing Advanced Medical Access
to The Less Privileged.

Introduction

This project entitled “EquiMed” is solving the shortage of medical experts and it computerize the manual process

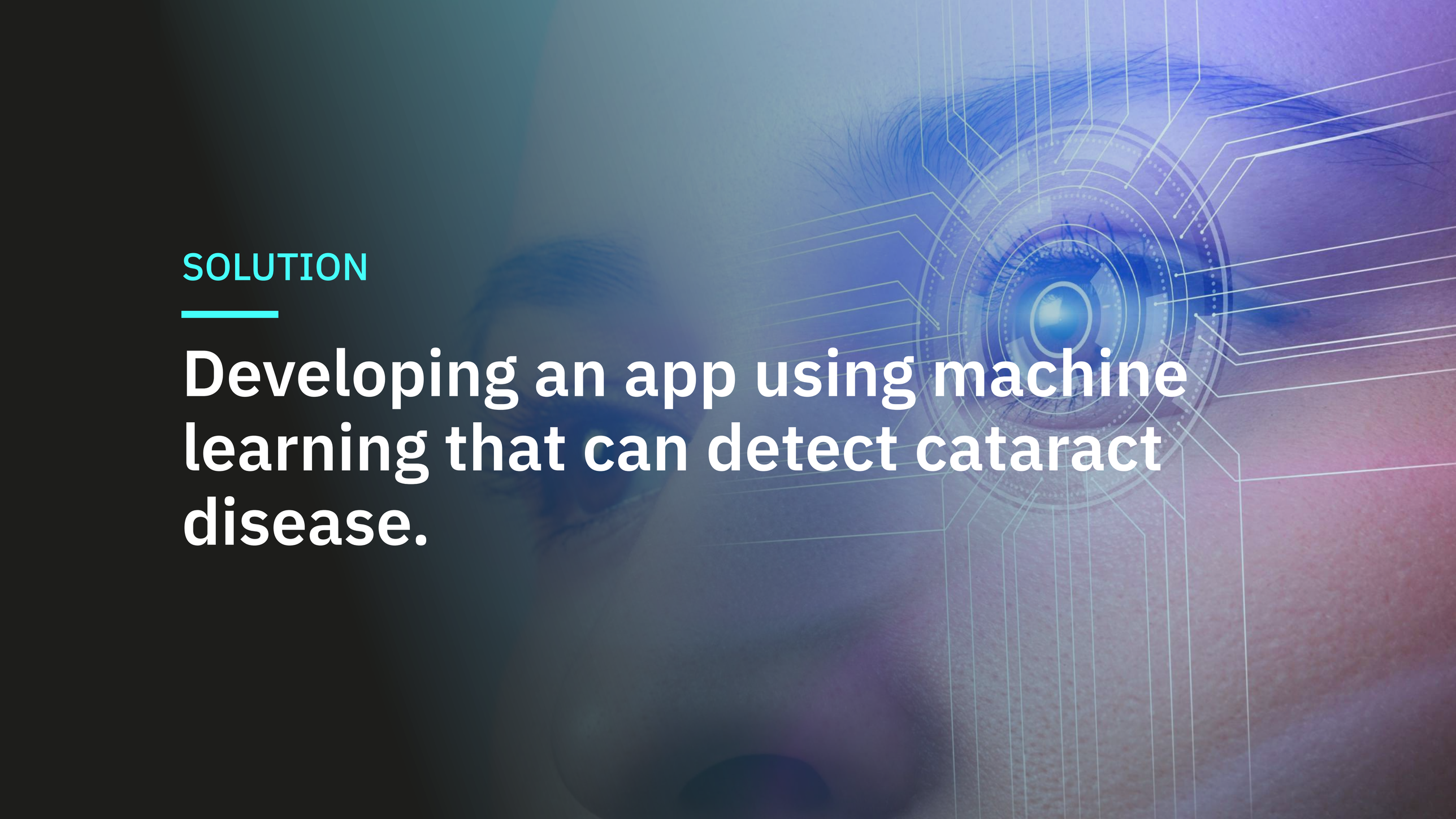
The main purpose of this project is to bridge the gap in medical access.

PROBLEM

In developing coutries like India, the inequality between urban and rural health care is a serious issue.

CAUSES

- **Shortage of qualified healthcare providers/trained specialists to examine the results.**
- **Inability to diagnoise at early stages of the disease**
- **Not being affordable**
- **Over workload on medical professionals**



SOLUTION

Developing an app using machine learning that can detect cataract disease.

How it impacts?

How this solution is making an impact in the real world.

According to World Health Organization

2.2 billion

people around the world have vision impairments

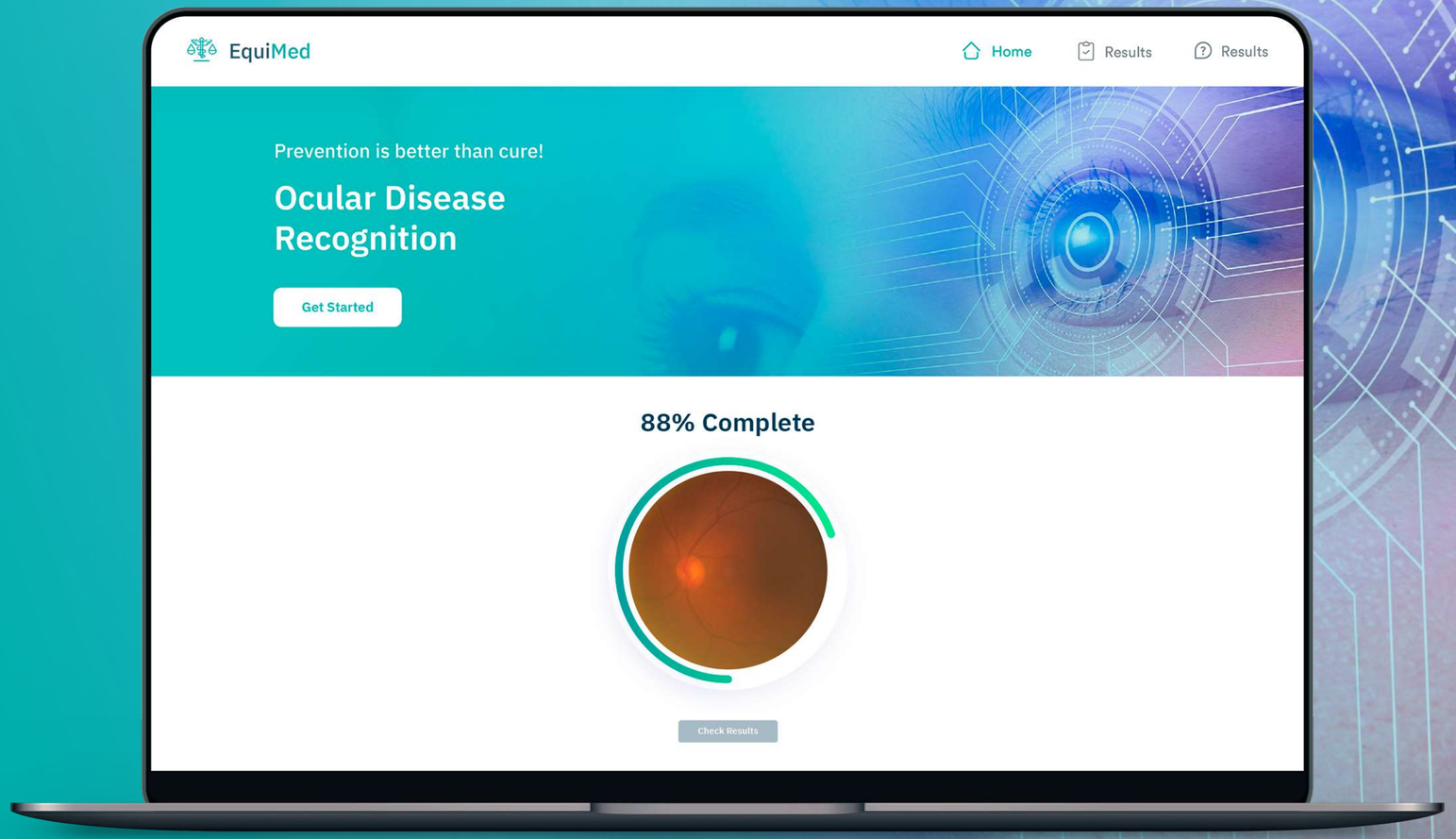
1 billion

of whom can be prevented with early diagnosis

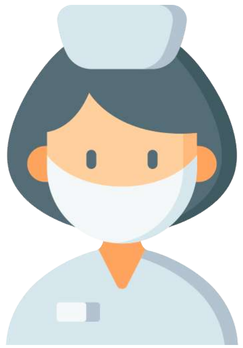
Rapid and automatic detection of diseases is crucial.

OUR APPLICATION

Ocular Disease Recognition Platform



BLOCK DIAGRAM



User

Front end

HTML

CSS

JS

Back-end

django

classifier.h4

TECH STACK

- **Python**
- **Django**
- **Tensorflow - Keras**
- **HTML/CSS**

ADVANTAGES

- This app will help to screen a large amount of patients.
- Helps in early diagnosis of the disease.
- Solves the issues of shortage of medical experts.
- Reduce workload on doctors.
- Improve the efficency of analysis of the results.

FUTURE SCOPE

- We will be able to diagnose multiple occular diseases
- Will be able to connect patients to the doctor for additional treatment
- We can expand this to detect other diseases
- Deploy this software to analyze batches of images.

Rural areas account for 68-71% of India's population, but are served by just 34% of the country's doctors.

Golbal Health Now

CONCLUSION

Solving this deficit of rural doctors comes with ethical and pragmatic **challenges**.

DATASET COLELCTION

- **Ocular Disease Recognition**

  https://www.kaggle.com/datasets/andrewmvd/ocular-disease-recognition-odir5k

- **Cataract dataset**

  https://www.kaggle.com/datasets/jr2ngb/cataractdataset

- **Retinal Disease Classification**

  https://www.kaggle.com/datasets/andrewmvd/retinal-disease-classification

- **Eye disease dataset**

  https://www.kaggle.com/datasets/kondwani/eye-disease-dataset