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Mission Statement

WidVision is a non-profit organization that is dedicated to improving the quality of life for individuals with visual impairments. Among the many projects that WidVision has undertaken, we would like to introduce two of our flagship products. The first is "Vision AI," a cutting-edge human eye fundus screening system that is based on advanced AI deep learning technology. The second is "Vision Capture," a low-cost non-mydriatic fundus camera that is designed to improve the early detection of ocular diseases in low-resource settings.

Problem Statement

- 339 million individuals globally who are visually impaired
- 02) 43 million among them being blind

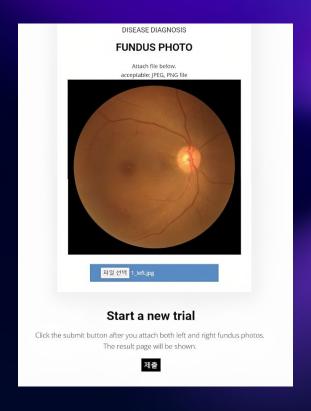
developing countries account for **90%** of the visually impaired population



The Solution: Vision AI

- advanced AI program + diagnosis website
- classify and analyze 24,000 fundus photographs
- four categories

 (normal, cataract, glaucoma, and diabetic retinopathy)



The Solution: Vision AI



The Solution: Vision Capture

- low cost non-mydriatic fundus camera
- designed to allow patients to capture their own fundus images without the need for mydriatic drugs
- utilizes an Arduino Uno, camera module, and convex lens to capture high-quality fundus images









Self-diagnosis kit Market Analysis

- The potential of a self-diagnosis kit for ophthalmology is significant, given the widespread use of such kits during the Covid-19 pandemic.
- People are likely to be familiar with ophthalmology self-diagnosis kits due to their experience with other self-diagnosis kits.

Self-diagnosis kit Market Analysis

- Self-paced diagnosis eliminates the need to schedule and travel to appointments with an eye doctor.
- The cost of diagnosis is reduced since only a Vision AI and Vision Capture are required, as opposed to the fees associated with a traditional visit to an eye doctor.

Competitor Analysis

	WidVision	Xneuronic (2022)	Donga univ (2019)	Chungbuk univ (2019)
Multi classification (classify more than 4 diseases)	0	X	X	X
Website development	0	0	X	X
Accuracy above 90% (state-of-the art)	0	X	0	0
Fundus camera development	0	X	0	X

Current Progress

- The Vision AI finalized as a product with an accuracy rate of 90.8%
- Published as a website where people can upload fundus photos for analysis
- Multiple prototypes for the Vision Capture currently being developed
- Vision AI and Vision Capture both in the progress of gaining patents
- Ongoing development for multi-language support

Future Plan

- Production of the final prototype for Vision Capture
- 50+ models of Vision Capture built and distributed to African hospitals
- Vision AI developed to diagnose a wider range of fundus diseases
- Increase the accuracy rate of the Vision AI to over 95%.
- Ongoing research and development to improve the accuracy and effectiveness of both the Vision Capture and the Vision AI

Testimonials

An ophthalmologist from the local community

"Vision AI generates very accurate results and has been effective when used to diagnose patients at my clinic."

Ophthalmology patient

"Vision Capture for its effectiveness in reducing the time and cost associated with visiting an eye doctor."

AI health professional

"The community impact of the Vision AI and Vision Capture and the role that students are playing in leading future innovations is huge."

Closing Note

"At the core of our innovation is the belief that everyone deserves the opportunity to see a better tomorrow."