



A graphic design featuring the word "SKIN" in a bold, dark brown, sans-serif font. A vertical, light brown rectangular bar is positioned behind the letter "I". Above the top of this bar, the letter "A" is placed in a matching dark brown font. The entire composition is centered on a white background.

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# PROBLEM

- **BIASED DERMATOLOGY EDUCATION**

Examples of skin diseases are mostly of white skin

- **BIASED DATA COLLECTION**

Mostly light skin tone images in data basis

- **SYSTEMATIC BIASED AI**

Due to missing / unbalanced data, current AI models are not able to learn to classify darker skin tones well.

- **MISDIAGNOSIS & FATALITY**

People of Colour are less likely diagnosed correctly and therefore have lower survival rates when having a disease.

## ***Dermatology Has a Problem With Skin Color***

Common conditions often manifest differently on dark skin. Yet physicians are trained mostly to diagnose them on white skin.

### HEALTH

## **AI-Driven Dermatology Could Leave Dark-Skinned Patients Behind**

Machine learning has the potential to save thousands of people from skin cancer each year—while putting others at greater risk.

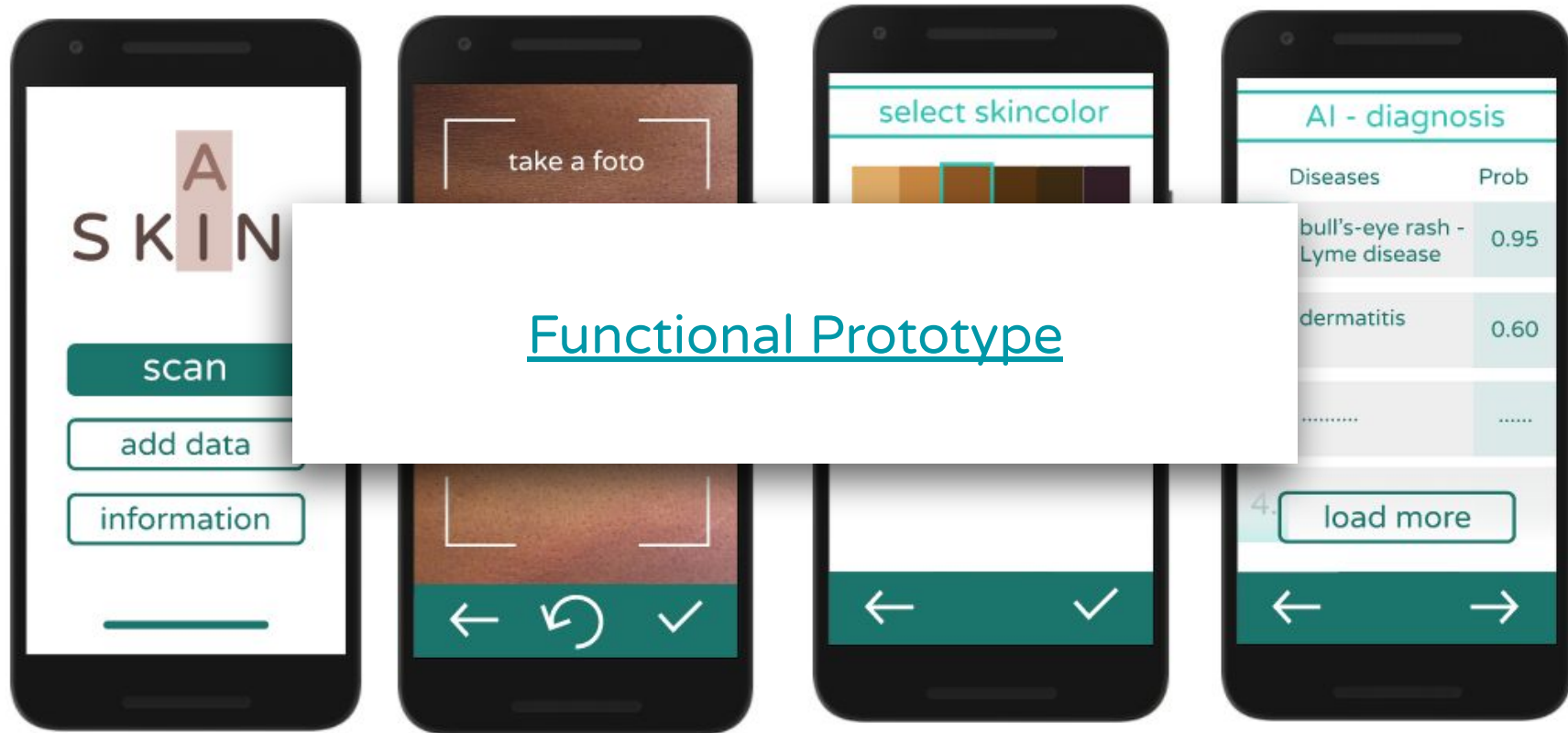
ANGELA LASHBROOK AUGUST 10, 2018

# SOLUTIONS



- **COLLECT DATA**  
To create educate & train an AI
- **EXAMPLE IMAGES**  
To educate and help to diagnose
- **INCLUSIVE AI**  
Train multiple data sets of different skin colors separately
- **EASY APPLICATION**  
For dermatologists to collect data, diagnose and then help to improve the future AI models

# APPLICATION



# SOURCES

## LITERATURE

- <https://www.nytimes.com/2020/08/30/health/skin-diseases-black-hispanic.html>
- <https://www.blackandbrownskin.co.uk/our-vision>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7136423/>
- <https://www.theatlantic.com/health/archive/2018/08/machine-learning-dermatology-skin-color/567619/>

## IMAGES

- [https://www.freepik.com/free-vector/doctors-concept-illustration\\_7191136.htm#page=1&position=1](https://www.freepik.com/free-vector/doctors-concept-illustration_7191136.htm#page=1&position=1)
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