

# Falcon Vision AI

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An AI-powered app that helps visually impaired individuals navigate their surroundings using vision-to-language and speech recognition.



**By: Alex Glebov & Jay D. Castelli**

Team



**[alexpwr/falcon-hackathon.git](https://github.com/alexpwr/falcon-hackathon.git)**

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# The Problem



**68% of visually impaired individuals surveyed have experienced significant life event (including fires, serious accidents, sexual assaults, life-threatening illnesses, and severe human suffering). This rate is notably higher than in the general population.**

**APA Style Citation: Brunes, A., & Heir, T. (2021). Serious life events in people with visual impairment versus the general population. International Journal of Environmental Research and Public Health, 18(21), 11536**







# Solution - Falcon Vision AI

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## Current

Basic object detection/GPS for visually impaired. Lacks context awareness.

## Falcon Vision AI:

- Real-time environmental analysis
- Natural language interaction
- Personalized assistance

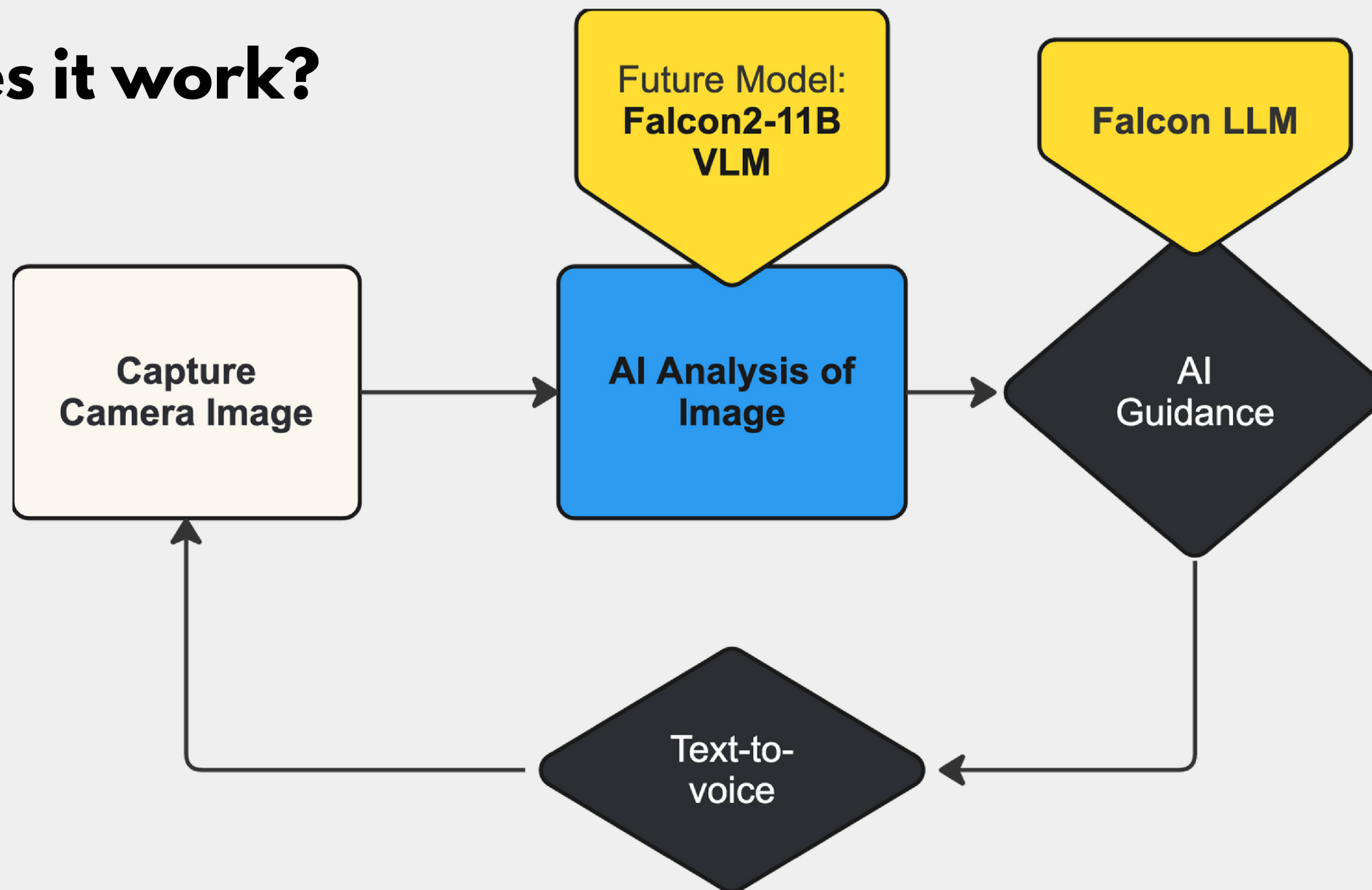
## Impact

Enables independent navigation and interaction for visually impaired, improving life quality and safety.





# How does it work?



Falcon Vision AI

# How does it work?

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VisionAid app uses AI to boost independence and safety through real-time environmental analysis and guidance.



- 01** Voice-activated with large on-screen button
- 02** Mobile AI vision with real-time assistance
- 03** Continuous AI analysis for safer movement guidance





# Technologies Used

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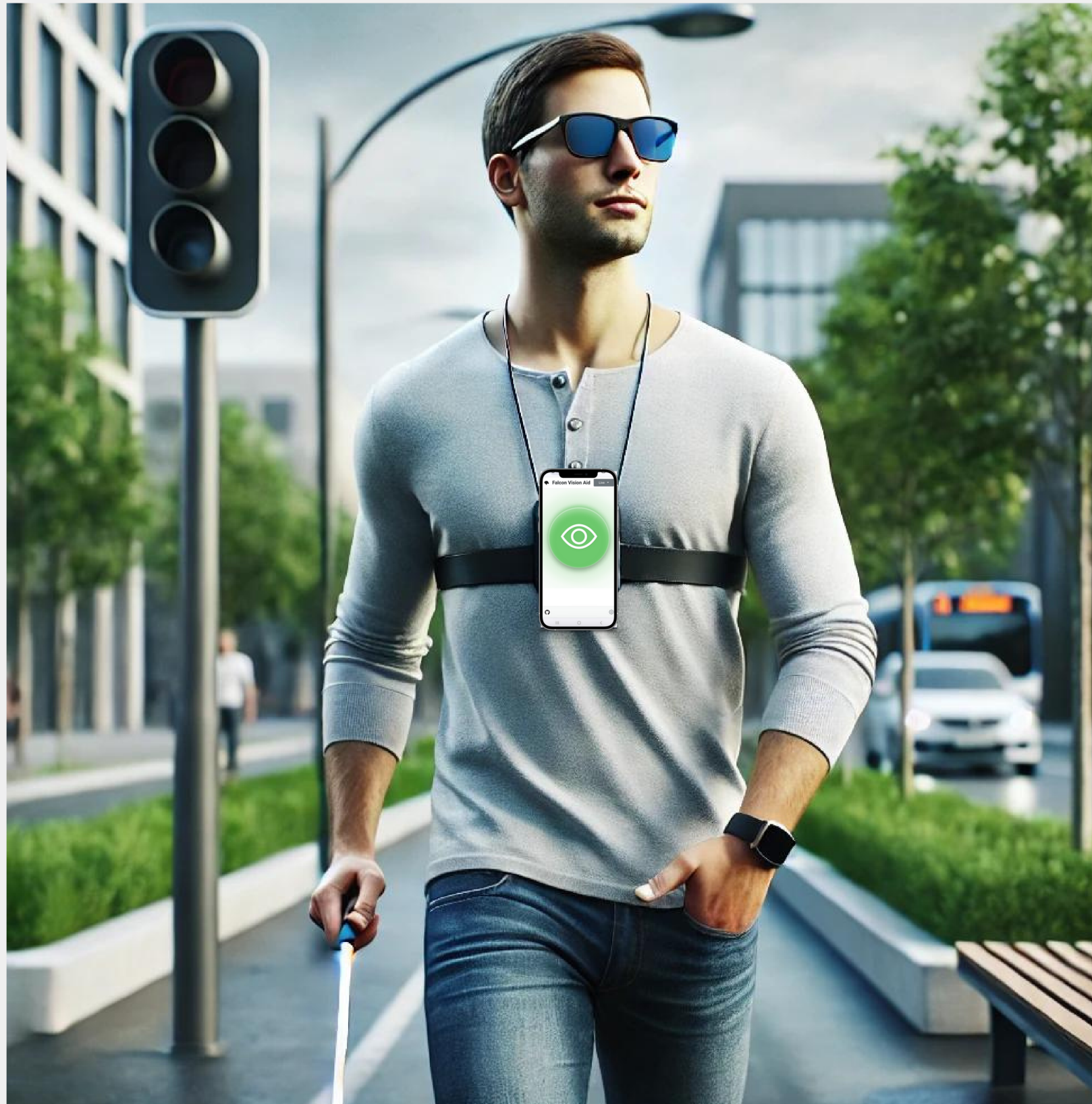
Falcon **180B**

Falcon **2**



android 





# Business Value



## Total Addressable Market (TAM)

In 2020, 43 million blind and 295 million with Moderate or Severe Distance Vision Impairment (MSVI)

## Serviceable Available Market (SAM)

We estimated 10% of the MSVI population could adopt Falcon Vision AI.

## SAM Estimate

- **10% Adoption:** Approximately ~30 million users

## Revenue

- **Free + Monthly Subscription:** \$10/m = \$3.6 B/y.





# Strategic Opportunities

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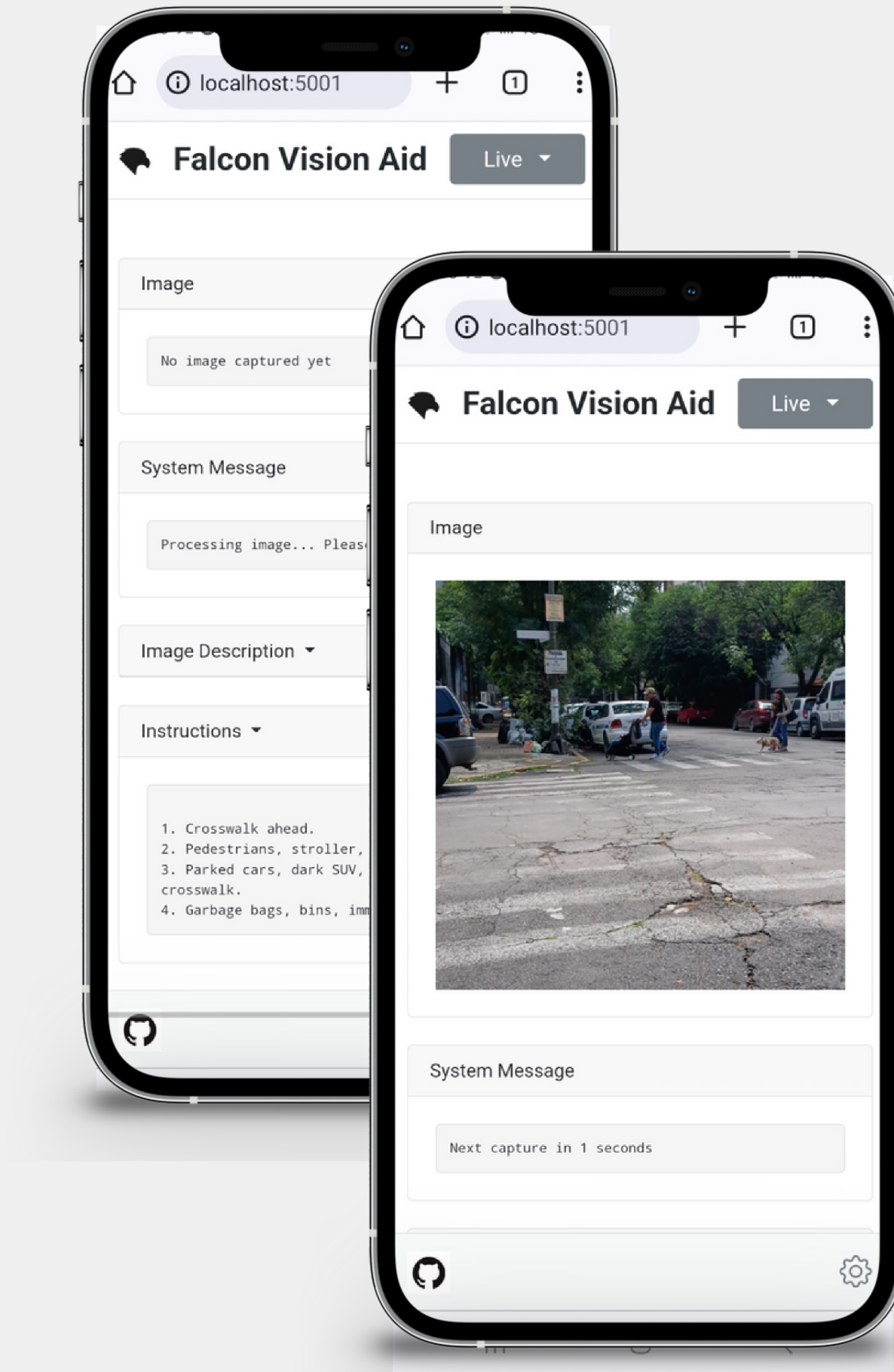
- Secure government funding for disability assistance
- Collaborate with charities, insurers, and healthcare providers
- Bundle with programs offering free accessible phones to the visually impaired
- Establish partnerships with:
  - Samsung Life Public Welfare Foundation
  - Samsung Welfare Foundation
  - Google Accessibility team

# More to come



## Features We Are Planning to Implement

- Build Mobile App
- Advanced object/person detection
- Integration with Falcon 2 11B VLM
- iOS support
- Integration with Google Maps
- Optimize Speed







# Demo



Contact us to learn more

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