

EyeSee

Find Your Way



Team Members (P9)

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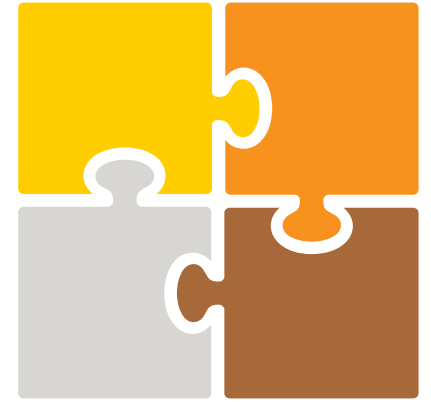


Introduction

Use of object recognition to detect obstacles and help elderly or the visually impaired to avoid them.



Background & Motivation

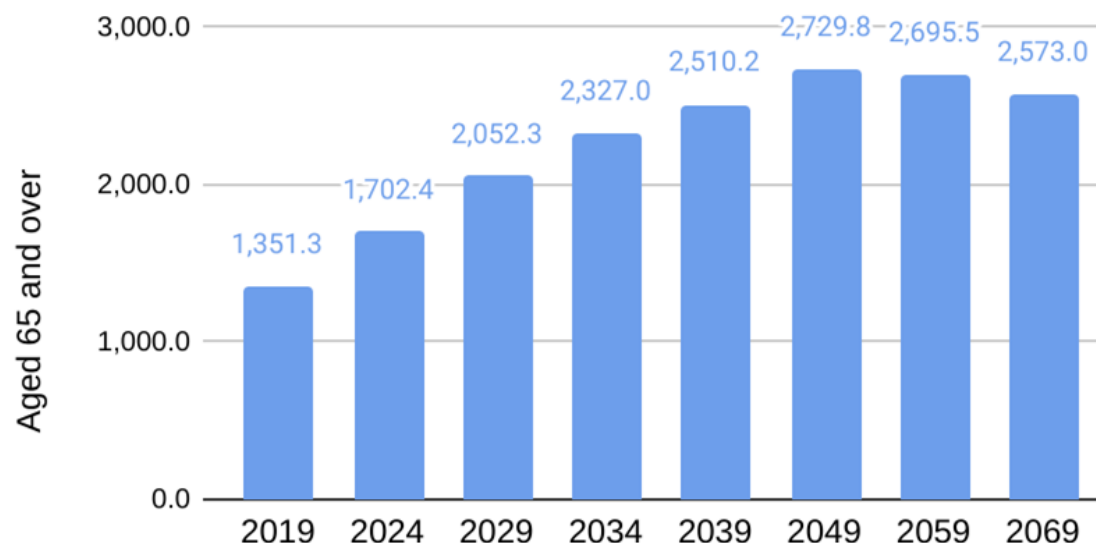


- Poor mobility of elder population
 - Online statistics show that approximately 36 million trips are recorded among the elderly yearly
 - Elderly and the visually-impaired may have restricted movements, poor responsiveness, or worsened eyesight
 - Easily bump into objects
 - May not be able to see the obstacles/unable to react in time

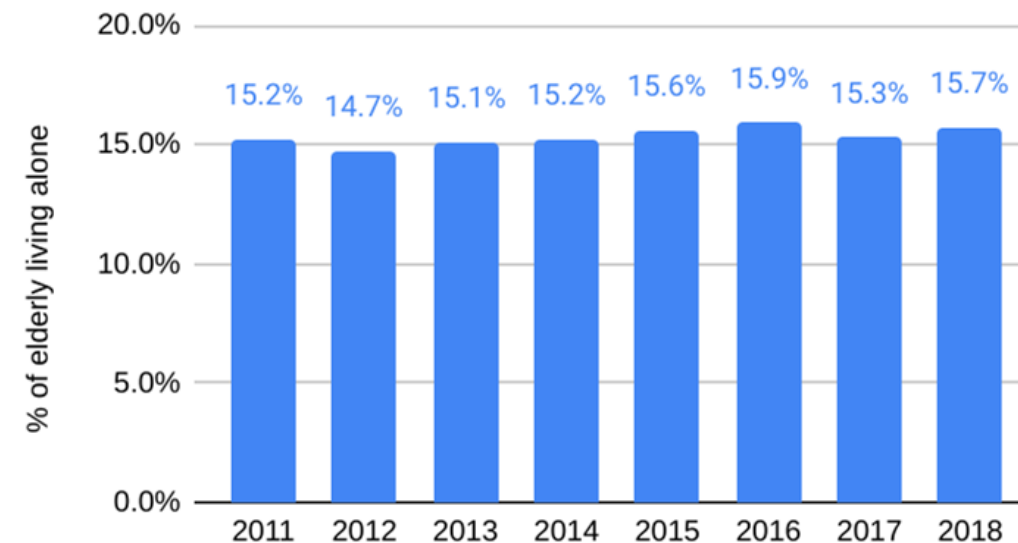


What is the target market?

Hong Kong Population Aged 65 and over



Percentage of elderly living alone



¹ Office of the Government Economist – Economic Letter 2019/02

² <https://www.socialindicators.org.hk/en/indicators/elderly/31.11>

³ Thematic Household Survey Report No. 50, Census and Statistics Department



Target Market

Elderly people & the visually impaired





Existing Solutions

- SmartPeep
- An AI-based chair fall prevention device
- Alerts caretakers in an eldercare facility when elderly attempts to get up from a chair
- Limitations:
- Not quite practical as the device can only be of use in an eldercare facility
- Remedial measures instead of preventative measures





What is **your solution**?

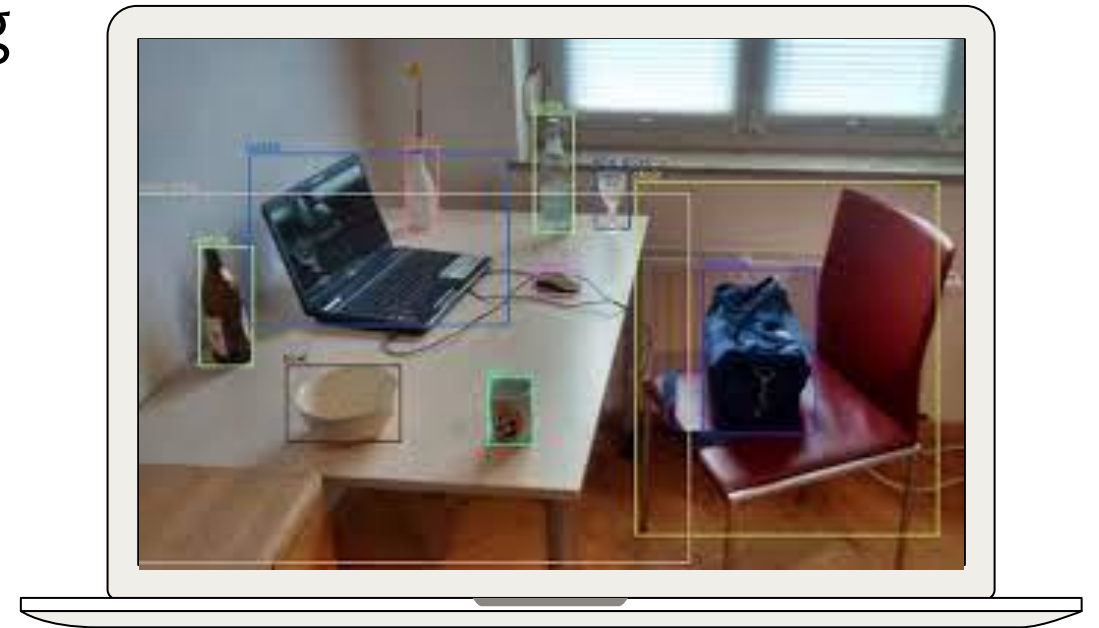
- Collision avoidance and alert device
- Webcam that detects and identify obstacles in the surroundings
- Buzzer that emits a sharp sound when the user is near an obstacle
- Allows enough time for the user to avoid the obstacle/react





What is **your solution**?

- Object detection (360 deg full scan of surroundings to observe any objects surrounding the user)





Future work

- ◎ Expand scope of use
 - 1) Technology works in both bright and dim environments
 - 2) Technology works even in thick fog
 - 3) Technology works both indoors and outdoors



Thank you

*Any **questions?***

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