

School of Computer Science and Engineering

College of Engineering

Helping the Visually Impaired Map the **Real World**

A Visually Impaired friendly indoor navigation application

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	MAP	BEACON	CAMERA	
	IBEACON [F6:F3:49:58:E0:9E	 =]	0.99 m 2020-03-29	
	UUID • b9407f3 Major • 57502 RSSI -74	0-f5f8-466e-aff9-25 Minor • TX -74	9-25556b57fe6d or • 18776 74	

IBEACON	1.30 m
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RSSI -77

RSSI -77

- ✓ Full interaction with application through voice.
- ✓ Audio feedback from

No SIM 奈 0 B/s	03:59	9	@ ≱ 34% 🔲	
MAP	BEACO	NC	CAMERA	
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1				

- ✓ Real-time navigation update
- ✓ Voice Guided





Project Objectives



✓ Obstacle detection to ensure safety of Visually Impaired

Design and implement a Visually Impaired friendly Indoor Navigation System by utilizing multiple Estimote Beacon. Additionally, implement Object Detection Algorithm to make travelling indoor safer for the Visually Impaired by alerting them of the obstacle. Lastly, implement vocal interaction so that Visually impaired can fully interact with the system without much physical touch.

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