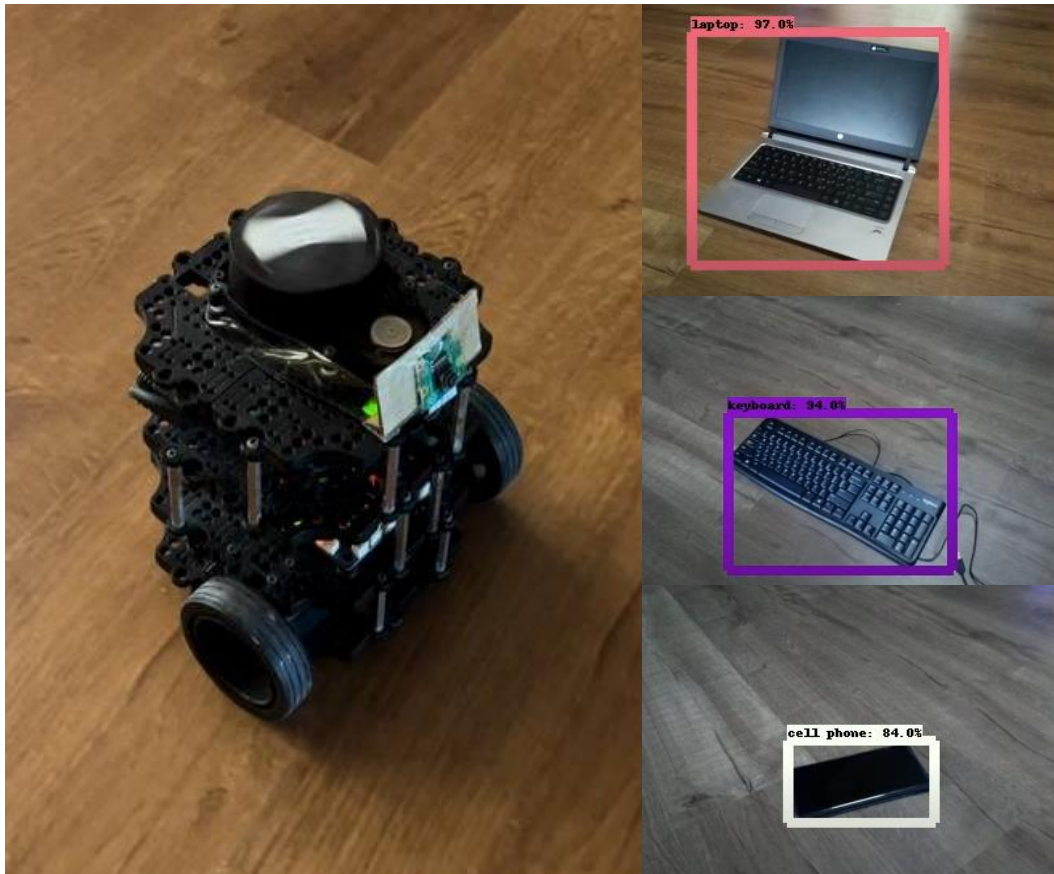# Intelligent Robotic Navigation
As a Child Companion

Student: Chew Zhi Kang   Supervisor: Dr Smitha K G

TurtleBot3 and Object Recognition

Child Tracking around a household

Project Objectives:

This project aims to develop a functionally tested TurtleBot3 capable of being a child companion with intelligent robotic navigation. The robot should be able to supervise a child by detecting and following the child around the house and notifying the parents immediately when the child falls. This will provide parents with a greater ease of mind and certainty when they have no choice but to leave their child unsupervised at home for a short period of time.

Features:

Real-time Object Recognition and Child detection using TensorFlow

Track and follow a child's movement by keeping the child within the Raspberry Pi Camera's field of vision

Determine if child has fallen at home

WhatsApp Notification using Imgur and Twilio API

WhatsApp Notification of child fallen