Data Specifications

Project: Design an Autonomous Robot

Task: To design an autonomous robot that is capable of navigating to a predetermined position while avoiding obstacles and firing objects at two targets. This is to be done in the shortest time possible.

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Contents

[Ultrasonic Localization 2](#_Toc416464197)

[Light Localization 2](#_Toc416464198)

[Navigation 2](#_Toc416464199)

[Obstacle Avoidance 2](#_Toc416464200)

[Launching 2](#_Toc416464201)

# Ultrasonic Localization

Detect to minimum

Advance to Intersection

Cannot fail

Both localization within 1 minute

# Light Localization

Accurately define intersection

Cannot fail

Both localizations within 1 minute

# Navigation

Navigate to (9.5 , 9.5) with an error no more than the shooting area.

# Obstacle Avoidance

Safely avoid without collision

# Launching

Shoot over wall

Accurately within 7.5cm radius

Consistent, at least 1/3 each target

\*\*Subject to Change\*\*