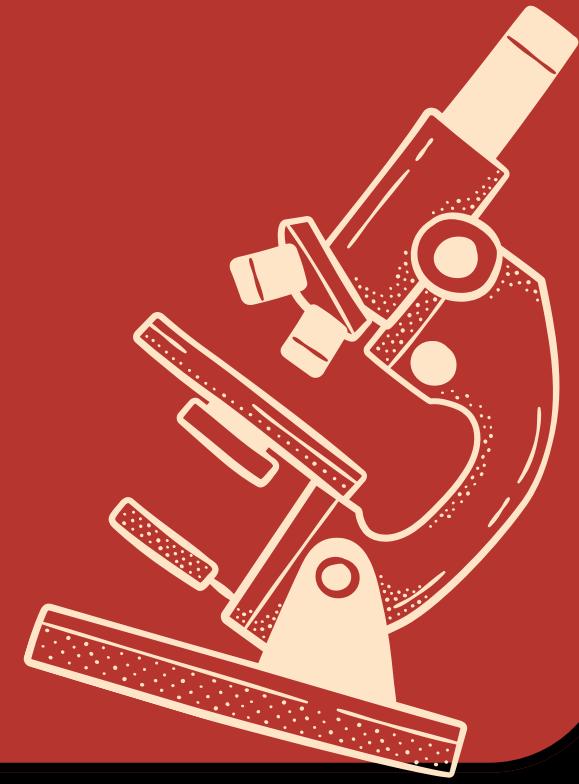


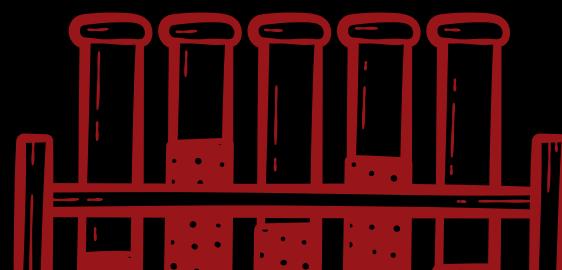
WALL SENSOR

We have made use of multiple infrared and ultrasonic sensors to detect and avoid wall to maintain our bot's position



COMPASS SENSOR

A compass sensor allows both our bots to always face the goal so that they never need to turn and makes it quite efficient



VVS BALLERS

IR SENSOR

Both robots use an IR sensor which detects pulses released by an IR ball. The sensor is used to detect the direction of the ball and manoeuvre the robot. It uses a scale of 0-9 to detect the cardinal directions

COLOUR SENSOR

The robots employ a colour sensor which helps keep them within the boundary and stops them from committing a foul and facing a penalty

Our

Shlok Karthik



Team

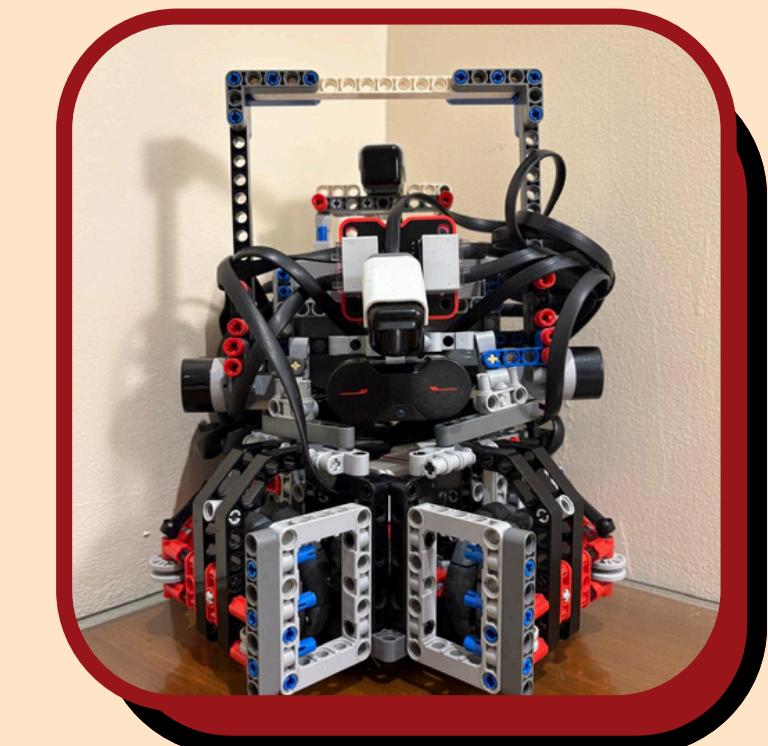
Kushal Sachdeva



Akshaj Gupta



Attackers



OMNIWHEEL

Use of a 4 omniwheel drive allows true omnidirectional movement which allows us out manoeuvre opponents to snatch victory



The team

The team consists of three members each with their contributions that allow the bots to reach their maximum potential. Shlok

Karthik has good experience in innovation and craftsmanship allowing for out - of the box adjustments and attachments while kushal

Sachdeva uses his masterful command over lego to shape our bot's into what they're today.

Finally Akshaj Gupta breathes life into them through is expertise in coding



ATTACKER

The attacker uses A colour sensor and three cardinal infrared, which allow it to stay within bounds. Alongside this, it uses a compass and IR to triangulate the ball's position, and successfully score it by pushing it into the goal. We have used some unique items such as a multiplexer allowing us to connect 6 sensors together to help coordinate the robot and achieve victory

DEFENDER

The defender uses A colour sensor and up to two ultra sonic which allow it to stay within the D to block incoming shots. Alongside this, it uses a compass and IR to triangulate the ball's position, and successfully slide in front to block or catch it. We have used an unconventional strategies with our second robot by relegating to the d and using it as if it were a line follower.

Defence

