

Solution Design

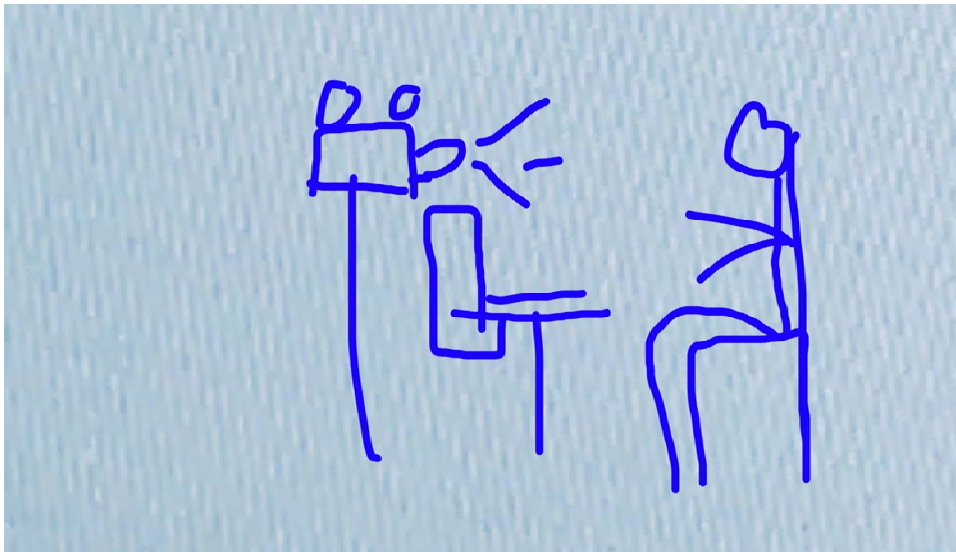
Team Terminator

Maxime Keita and Cory Bethrant

Maxime Kita

The problem statement is to create an intelligent robot which understand the ways and rules to play the tic tac toe game against a human. The goal is to beat the opponent, to know when it is its turn, and will use the camera integrated in it to scan the whole grid.

My concept was the mounted rail system with separate camera.



Positives: The positives side of this concept are

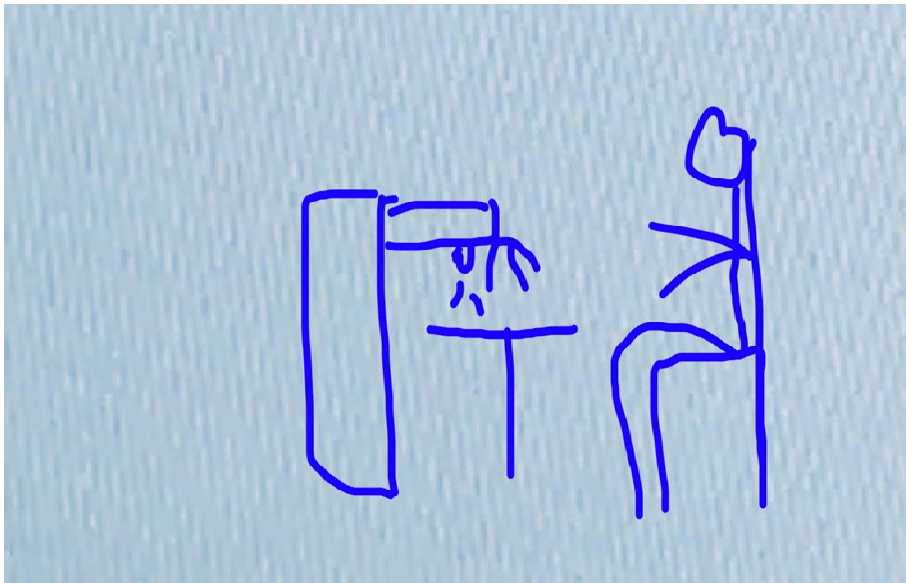
- It is possible with LEGOS/ and plus it is easier to build
- It stays connected to the Desk

Negatives: The negatives side of it are

- It separates camera results in Variable Angles
- The rail systems will require many movements to end turn

Cory Bethrant

He came up with the Standalone claw crane with attached Camera



Positives:

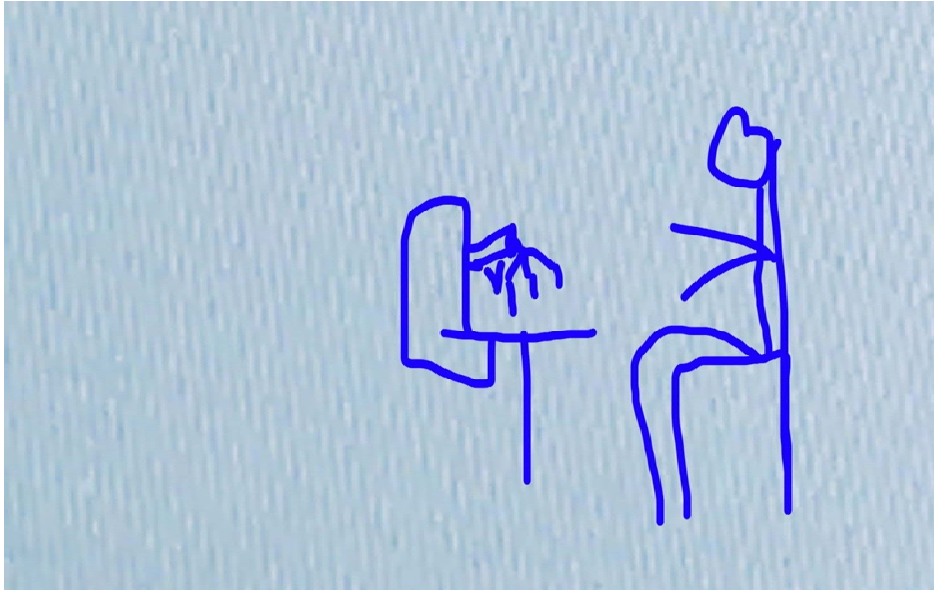
- It is fast and directs movements
- It does not require mounting mechanism

Negatives:

- The standalone claw crane results in variable angles
- It is more challenging and it is expensive to build

Final Concept

Mounted claw crane with Attached Camera



Positives:

- It is fast and directs movements
- There are no variable angles
- Everything is in single enclosure

Negatives:

- It is more challenging and more expensive to build