

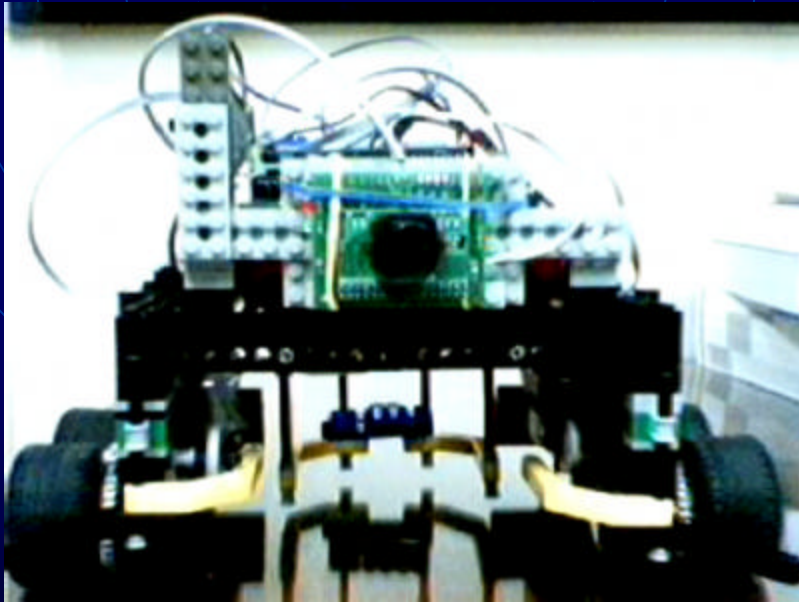
The background of the slide is a dark blue gradient. It features several sets of concentric circles in a lighter blue color, which are centered on the page. The circles overlap and create a complex, geometric pattern. The text is centered and rendered in a white, serif font.

# Project 3

Team 4

Rahul Kotamaraju, Matthew  
Lawrence, Justin Fuller

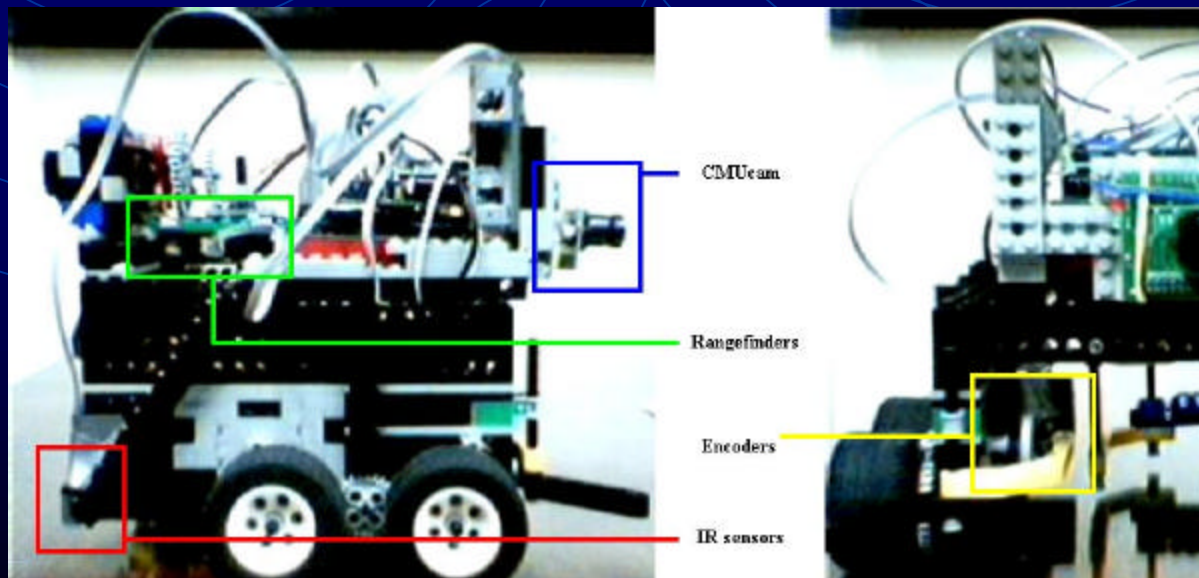
# Hardware Overview



- Drive
  - 2 DC motors
  - 4WD
- Housing
  - Pass-thru undercarriage
- Traction
  - Wide wheels with wide wheel base
  - 5:1 gear ratio
  - Heavy robot

# Sensor Overview

- Encoders – Focus on Odometry
- IR Sensors – Alignment
- ET Sensors – Intelligent Cage
- CMUcam – Handling the Unexpected



# Software Overview

- World Model
  - Locations of blocks, destinations, and self
  - Keeps track of block population
- Deliberative Architecture
  - 3 Tasks, repeated until blocks are depleted
  - Actually, invokes reactive behavior for brief moment in block delivery cycle

# Procedure

- Task 1: Obtain Block
  - Calculate nearest block and travel there
  - Close cage
- Task 2: Travel to Destination
  - Calculate nearest destination and travel there
  - Release Cage
- Task 3: Deliver Block
  - Move out of destination and signal delivery
  - Open cage

# Success

- Hardware
  - Exceptional odometric control
  - Cage worked as planned
- Software
  - Code more than adequately tracked location
  - Should utilize more sensor capability

# Questions?

