

# Presentation @Home team

By: Amigo & the demo team



Tech United Eindhoven



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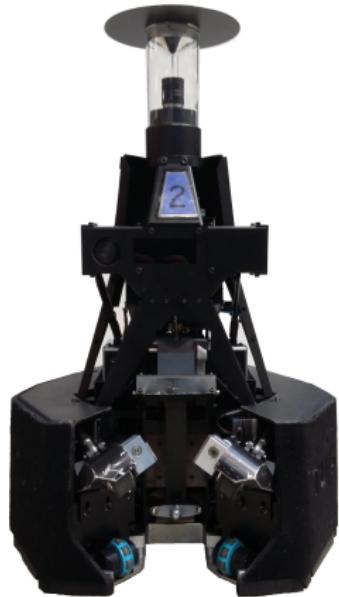


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# Robotics team of the TU/e



Middle Size League (MSL)

# Robotics team of the TU/e



@Home team

# Robotics team of the TU/e



## Meet AMIGO!

- Autonomous Mate for IntelliGent Operations
- Human like
- Height: 1.5 meter
- Weight: 80 kg

# Challenges

# Omni-wheels



Drive anywhere needed or wanted!

- 4 implemented wheels
- Driven in 1 direction
- Friction-free in other directions
- Rubber rollers

# 'Seeing' the world



## I. 2 lasers

- Collision avoidance
- Torso & base

## II. Kinect V1

- Xbox
- Differentiate objects
- Recognizing people

## III. World model

- Mostly human made
- AMIGO makes small adjustments

# Arms & Torso



## II. Arms

- Human like
- 1 hand position → different arm positions

## I Torso

- Extends reach of the arms
- Reach different heights

# Sound



- I Microphone
  - Listen to commands
- II. Sound source localization board
  - Hear direction of sound
  - Real-time data rendering

# Thank you for your attention!



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