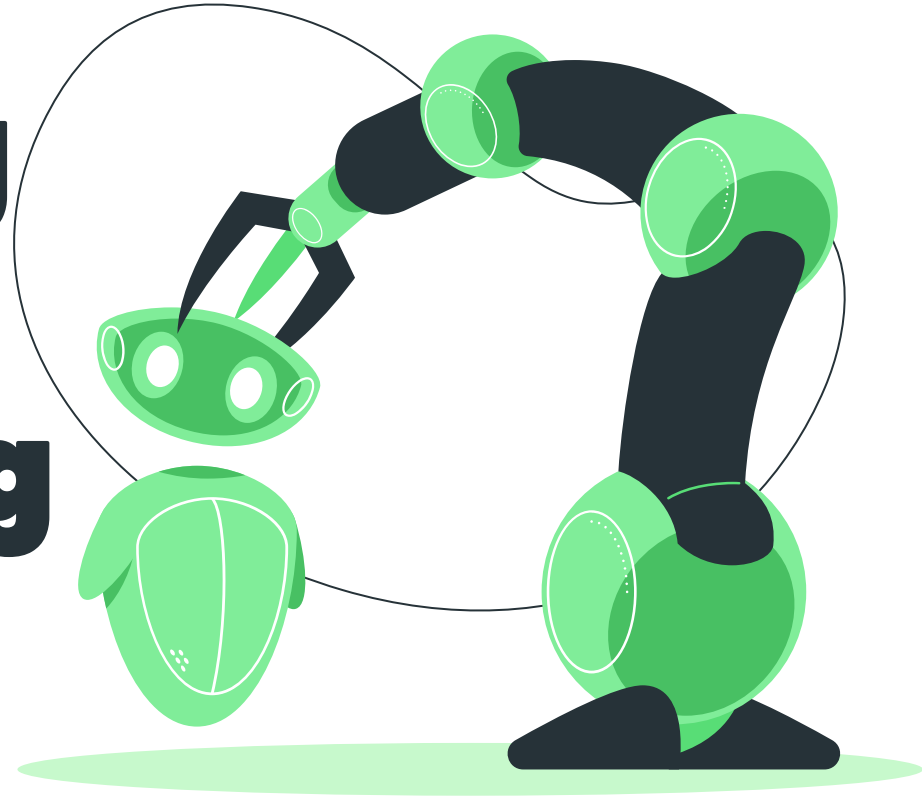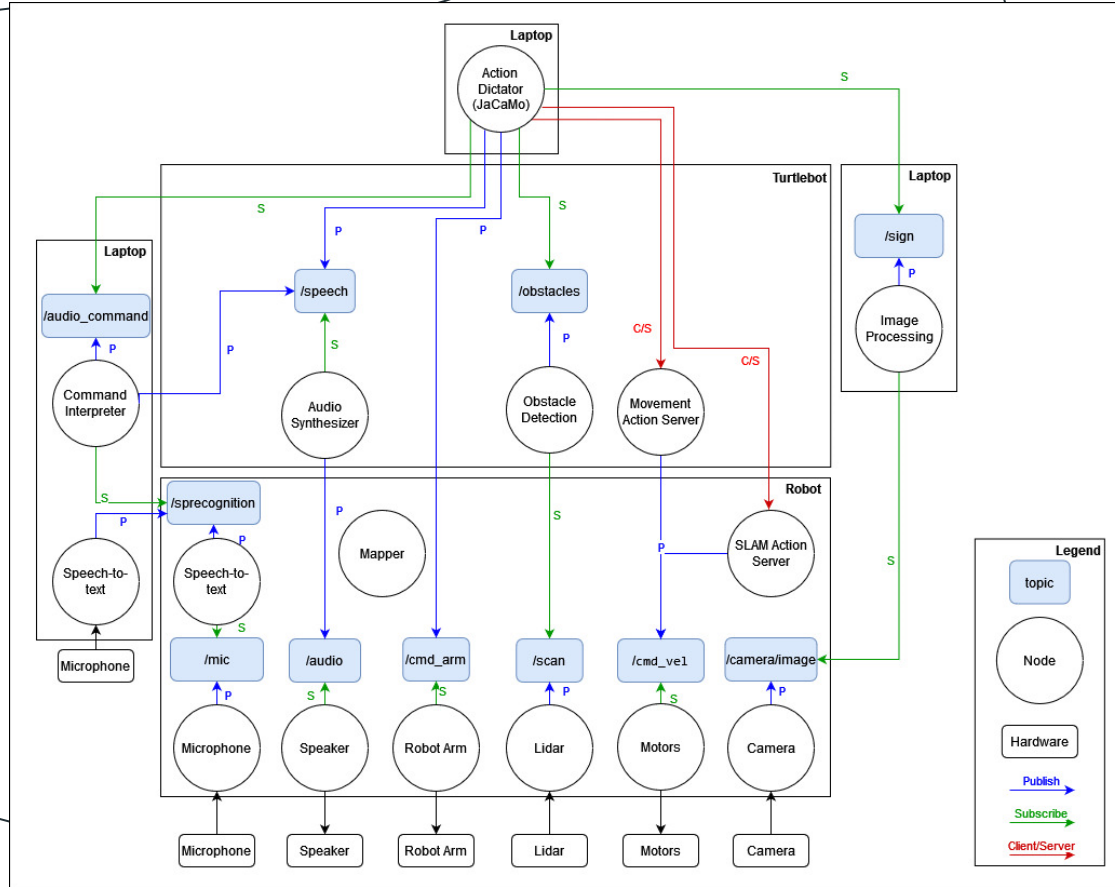# Integrating and Engineering Intelligent Systems

Organization

Repartition of the work

Arcady

Setup (LOW)

Action server (MEDIUM)

Action dictator (HIGH)

RDF (MEDIUM)

Quentin

Audio processing (MEDIUM)

Image processing (HIGH)

Microphones (MEDIUM)

Custom messages (LOW)

Obstacle detection (MEDIUM)

Improvement Suggestions

Obstacle detection: Cover more orientation (ex: 8 orientations)

Command interpreter: Add commands transporter, prendre and déposer

Image Processing:
- Compress the image before sending it to prevent saturating the network
- Avoid outsourcing the processing to a computer
- Testing the color of 2 and 3 strips
- Activate the sign processing only when needed

Action dictator
- More advanced obstacle avoidance
- Add the possibility to create several objects at once
- Smarter red-light handling
- Shift the position of workstations next to signs
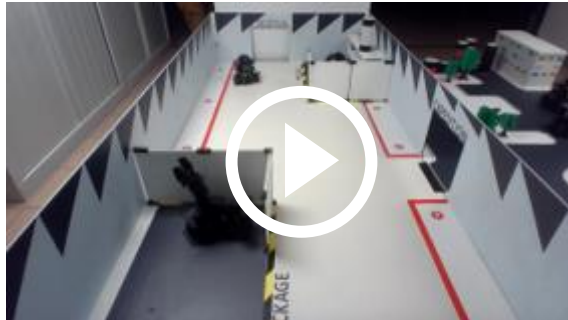- Add a proper stop instruction

Microphones
- Fix the microphone on the robot
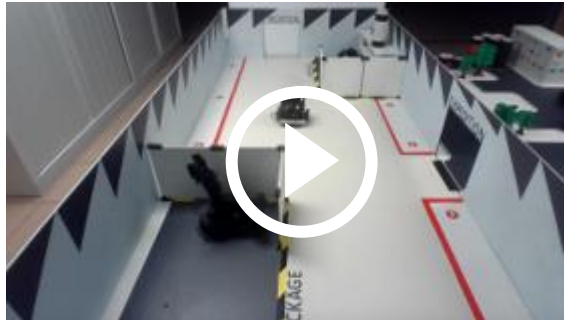- Investigating with local speech-to-text to reduce the delay

Demonstration

1

Traffic lights

2

Complexe object

3

Workspace registration