

ECGR 4161 - Extra Notes - 4/13/09

Announcements

①

Extra Credit: 4/15 seminar, 2pm
woodward 140, wireless applications

Extra Credit: send me a GOOD
youtube clip of cooperative/colony/
swarm robotics (0 to 3 minutes)
(note: just link)

Wed: Ultra sand & Chap 12 finish

Mon 4/20

Wed 4/22

Mon 4/27

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Types

Broadcast -
Current state
"found something"

Point-to-point

Specific information (found something, state)
specific directions

Goal-oriented

Implicit

State

Direction

Mechanisms

~~any~~ Pheromone/chemical

Radio

Audio

Visual

Electrical - direct connect

Magnetic

Light

Heat

(2)

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Swarm/Colony/Cooperative formation

(3)

Swarm - No structure
Specific task
Communicate with one another ✓
Not limited to an individual space

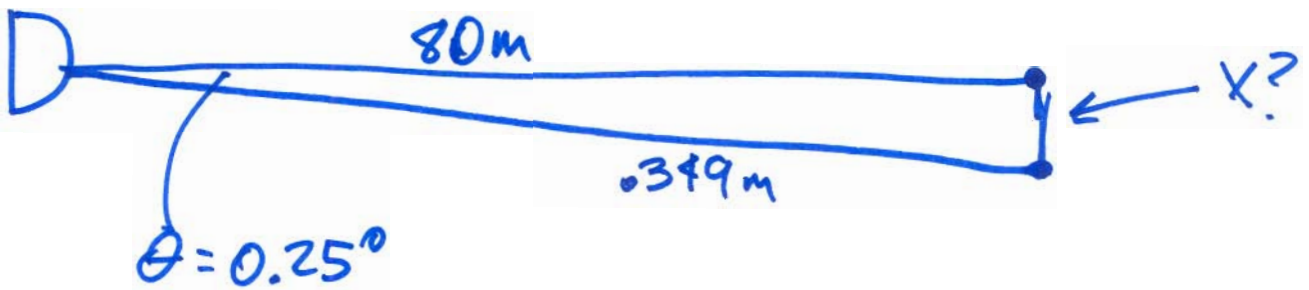
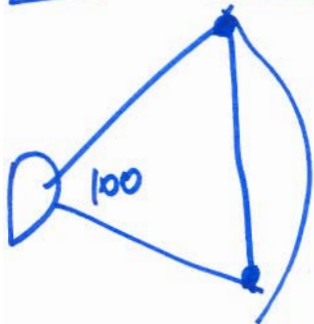
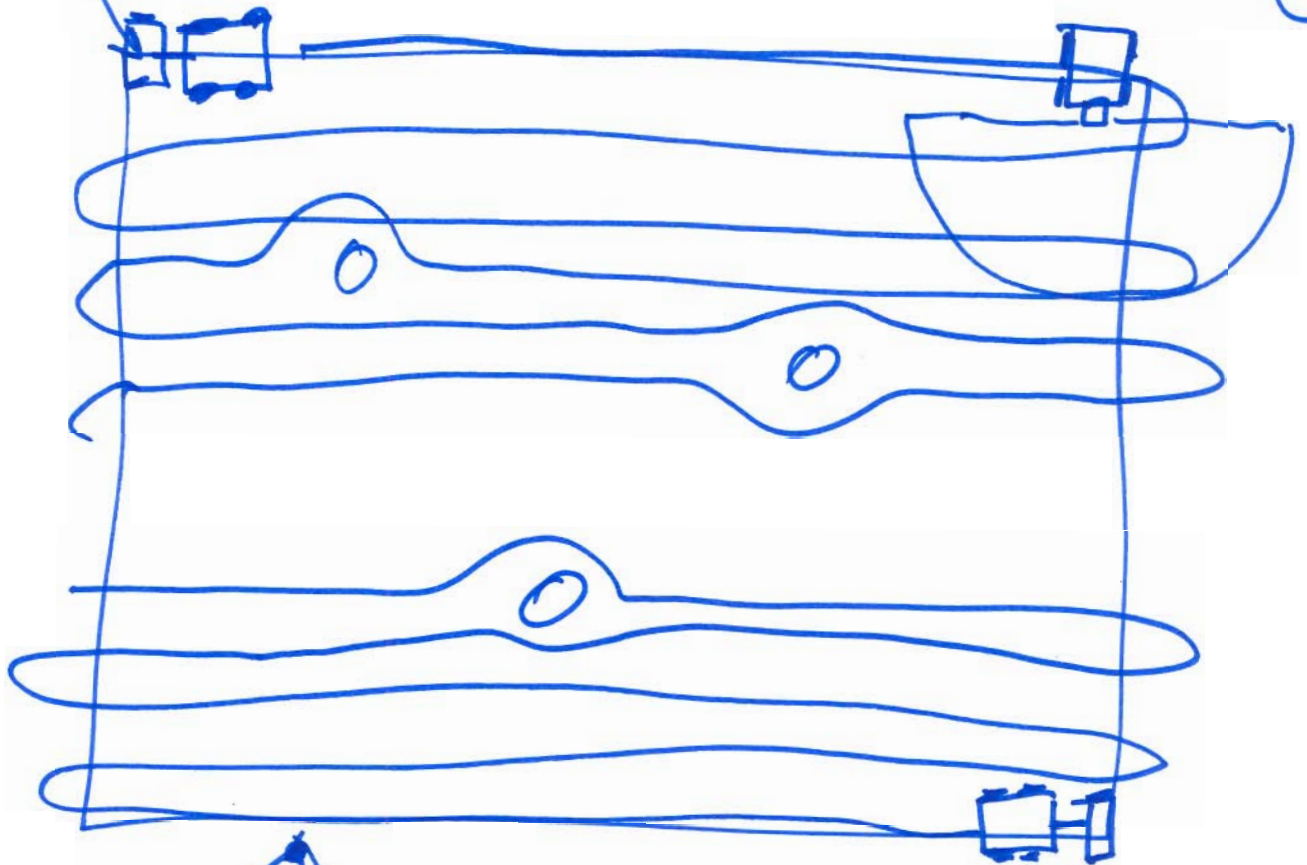
cooperative formation

- Centralized control/goal
- Specific location
- ~~complex~~^{larger} task, subdivided into individual tasks to robots
- can have localize goal as well

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Trailer

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$$40\text{m} = .1745\text{m} \quad \leftarrow y?$$

$$20\text{m} = .0873\text{m} \quad \leftarrow z?$$