RaLaZaBa ELECTRONICS

3rd Weekly Report

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Done

- We determined weight of objectives.
- We determined objective metrics.
- We chose our project.
- We drew block diagrams of projects.

To Do

- We will conduct intensive research about the project.

	Image Processing Intensity	Mechanical Design Challenges	Manufacturability	Know-How	Fun	Robust
3 Excellent	Project can be made without image processing.	No calculations and theoretical information about mechanical design is not required.	Procurement of materials is effortless, no need special components that are created at 3D printer and CNC.	In past, we worked on the similar project.	All team members can have fun during the project.	No operation failure with respect to environmental changes.
2 Good	Image process is assistant to make the project.	Some basic mechanical components such as junction can be used.	Some modules can be hand-crafted.	We are aware of the concept basis.	Three of team members can have fun during the project.	The project can be optimized for working at different conditions.
1 Unacceptable	The project is based on image processing.	Junction and suspension systems are required.	Unique materials are required, such as 3D printers and CNC machinery.	Only, we heard the concept.	Two or less of team members have fun during the project.	The project only works at the specified condition.
0 Unsatisfactory	The project totally depends on image processing.	Mechanical arms and joints are required.	A module is needed to re-invented.	Totally stranger.	None of team members can have fun during the project.	The projects cannot work properly with respect to the specified condition.

Table 1 Project rubrics

	Image Processing Intensity	Mechanical Design Challenges	Manufacturability	Know-How	Fun	Robust	
Weight	0,13	0,11	0,18	0,20	0,21	0,17	
Project 1	1	1	2	3	2	3	
Project 2	2	2	2	0	0	2	
Project 3	2	2	3	2	3	2	
Project 4	3	2	2	3	3	3	
Project 1 Weighted	0,13	0,11	0,36	0,6	0,42	0,51	2,13
Project 2 Weighted	0,26	0,22	0,36	0	0	0,34	1,18
Project 3 Weighted	0,26	0,22	0,54	0,4	0,63	0,34	2,39
Project 4 Weighted	0,39	0,22	0,36	0,6	0,63	0,51	2,71

Table 2 Project weights

Project I: Devices competing to catch falling balloons

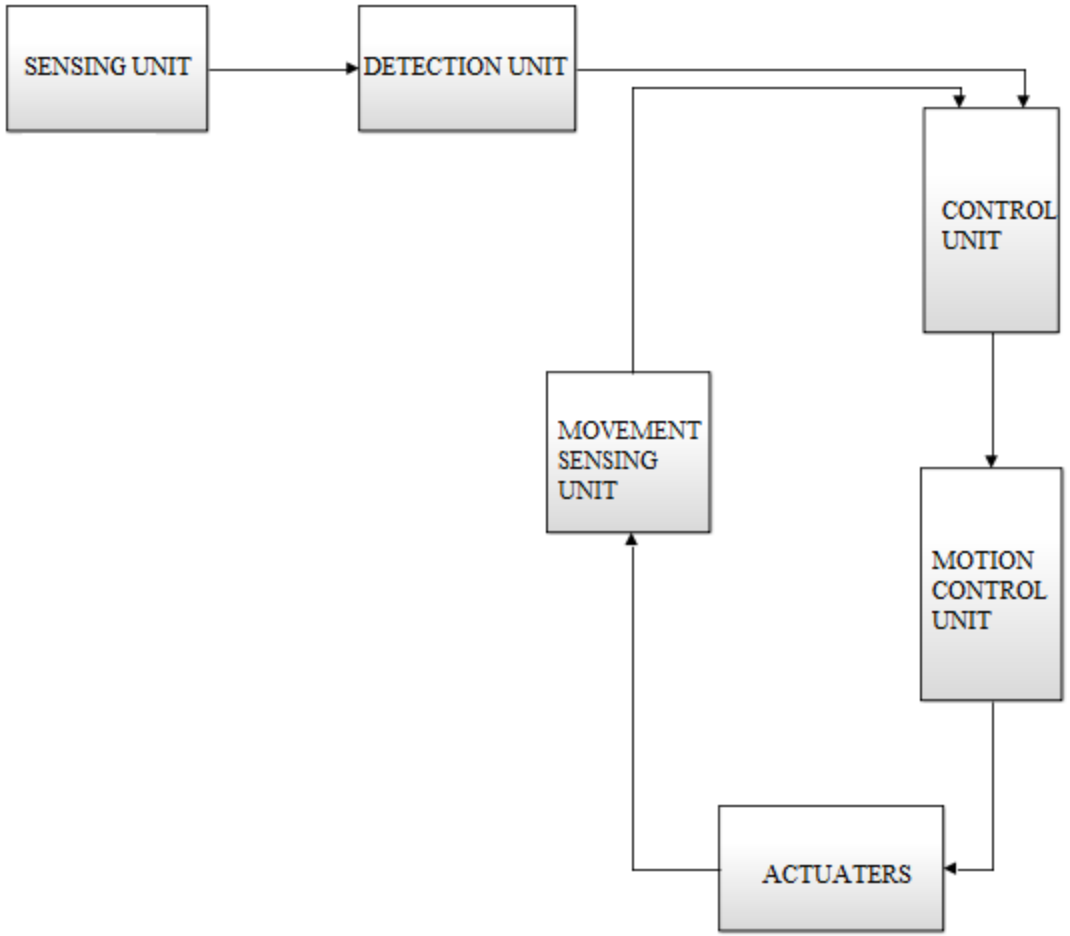

Figure 1 Block diagram of Project I

Project II: Devices trying to score in each other's goals

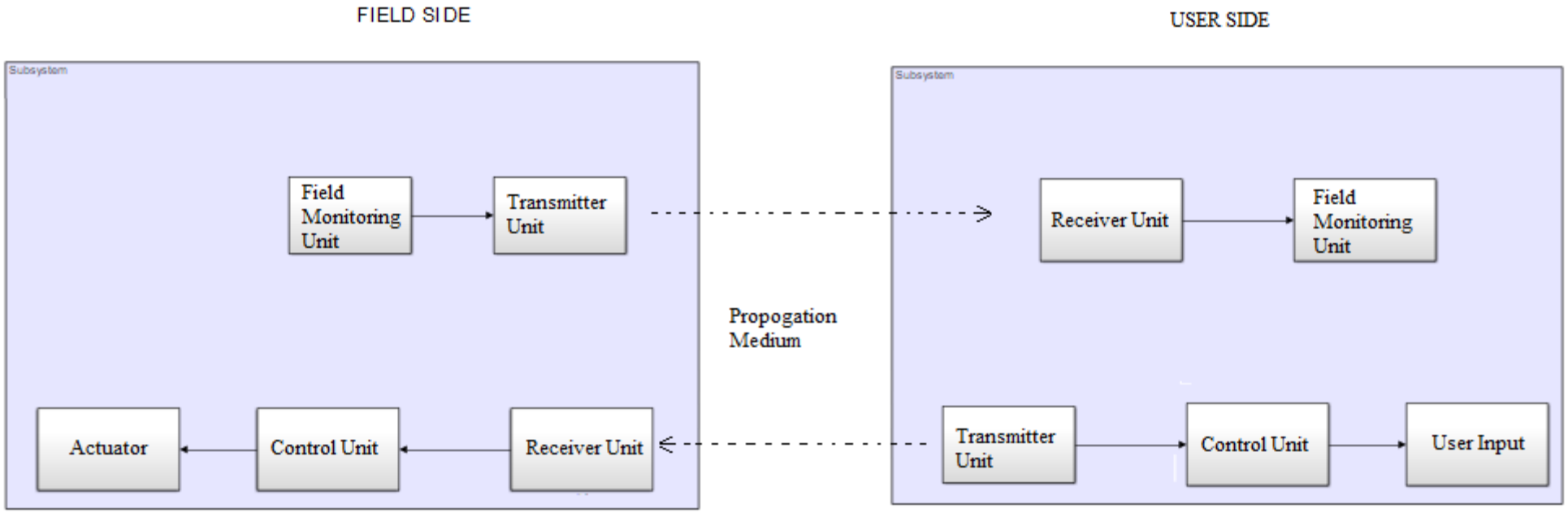

Figure 2 Block diagram of Project II

Project III: Vehicles chasing each other around a closed course with varying properties

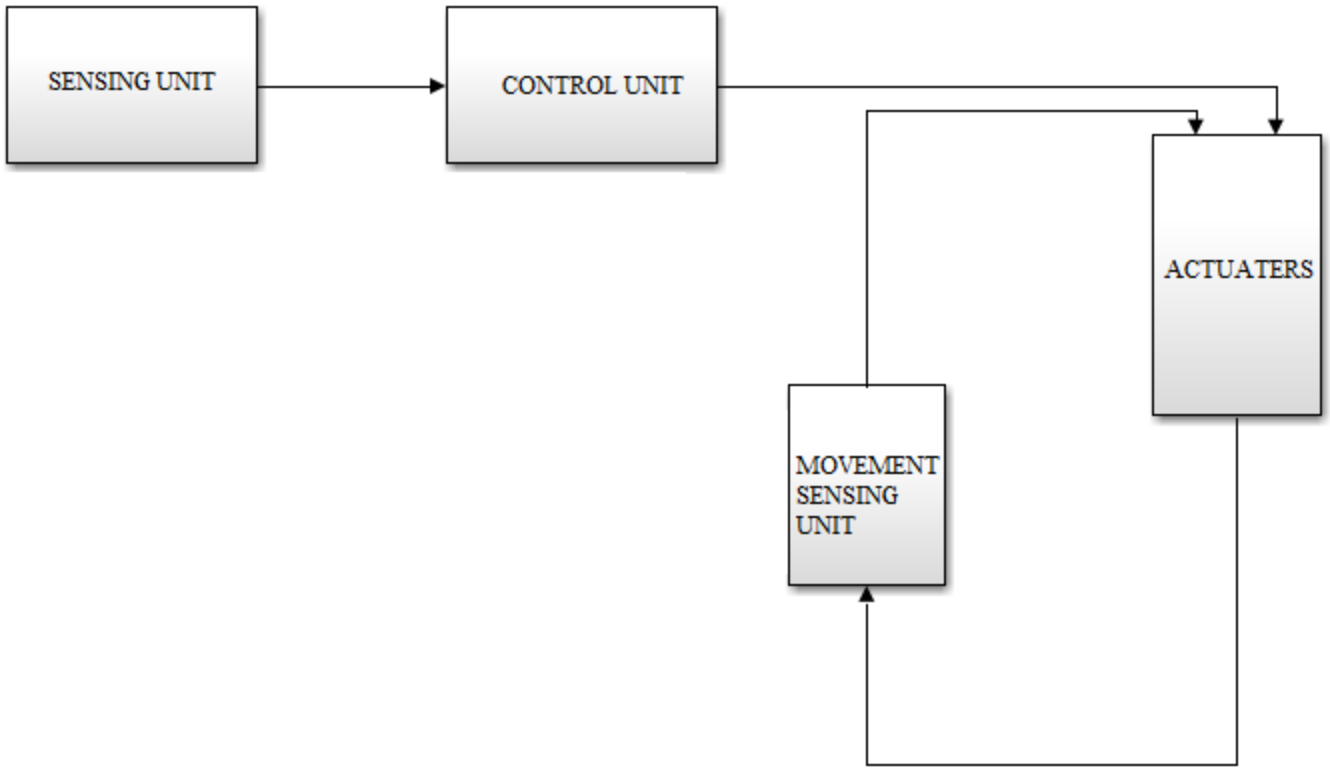

Figure 3 Block diagram of Project III

Project IV: Devices trying to extract the plan of their surroundings

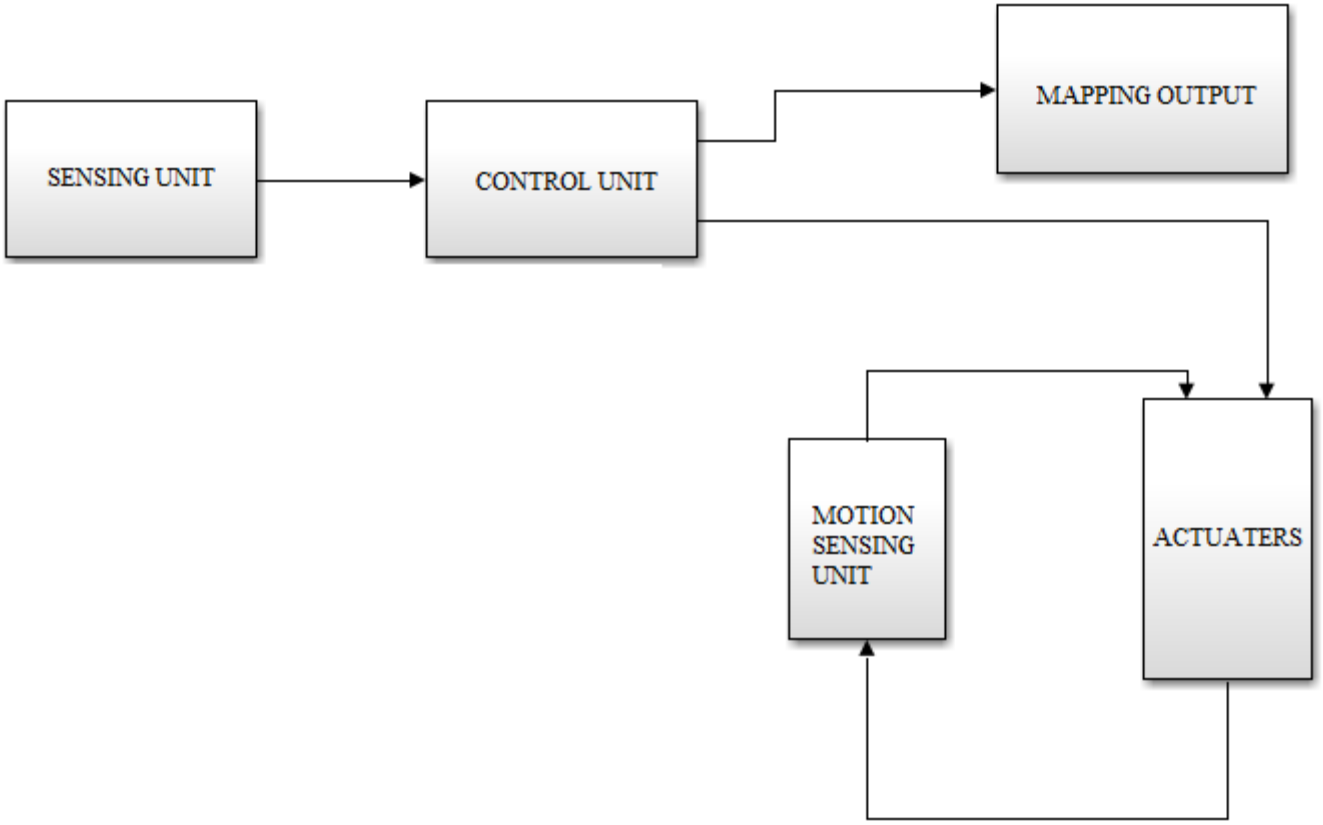

Figure 4 Block diagram of Project IV