

Weekly Report 08

I-CEE (Group 8)



İlker Danyal Kanatlı (EE / 20300513 / ikanatli@ug)
Oğuzhan Aras Bulut (IE / 20302558 / obulut@ug)
Esra Dokuzođlu (CS / 20302488 / edokuz@ug)
Berk Korkut (EE / 20402864 / korkutb@ug)
Ekin Kartal (IE / 20401946 / kartal@ug)
Ceren Hasançebi (CS / 20400322 / ceren@ug)

VIBRO-I

Due Date:

22.04.2008

Past Week's Accomplishments:

- Esra, İlker and Oğuz who have good communication skills have met with some traders from IE and EE departments.
- EE members İlker and Berk attached sensors on a belt and vibrator devices on a wrist band. Since our camera implementation also includes sensing with one of the wrist bands dedicated to sense the obstacles still undetected by the camera. (Vibrator devices on one band denotes all directions according to signals received from the image processing device fixed on the attachment accessory. Devices on the other band vibrate according to signals received from sensors when obstacles encountered which are undetected by the camera:

Process of Vibration Devices:

- **Left-Hand Wrist-Band:**
 - 3 vibration devices will be located:
 - One at the front
 - One at the right
 - One at the left
 - Each vibration device will vibrate according to the direction of the obstacle.
- **Right-Hand Wrist-Band:**
 - 4 vibration devices will be located:
 - One at the front
 - One at the back
 - One at the left
 - One at the right
 - Each vibration device will be objected to vibrate for each pre-defined different object.
 - Those pre-defined objects planned to be implemented in object detection software are: door, human body,

stairs and car. (in future development more to be defined)

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- We gave up searching in order to find an efficient sensor which can work in three dimensions and can sense through one meter efficiently according to our last meeting with Tarık Reyhan which took place in the weekly meeting last tuesday. In that meeting, Mr. Reyhan advised us to give up on the sensor implementation and to focus on the camera implementation as soon as possible.
- However, we(our CS members Ceren and Esra) have already been carrying on our research about finding a suitable object detection software which suits our needs(being capable of detecting certain still objects in still pictures, not in moving pictures i.e video, thus we have not been thinking on involving in image processing since it would be too difficult for us since neither of our staff have taken courses related to neither image proecssing, nor object detection).
- Ceren continued to maintain our company website as usual by keeping it up to date with recent documents and developments in order to notify the traders and also our course assistant and instructor.

Next Week's Planned Activities:

- İlker and Berk tested the prototype with only the sensors as mentioned above and with the cables(wires) providing data transmission between the devices(vibration devices and sensors). However, we try to get rid of the cables as we said in the previous weekly reports with the help of a bluetooth device. We are still in search of a suitable bluetooth device fully satisfying our needs(small, easy configurable etc.).
- We plan to test some candidate software we have found with some trivial still object pictures.
- We will continue keeping in touch with the traders and informing them about our process.