

SRVC Meeting(3rd July)

Team members present- Dave, Pooyan, Walter, Ankur, Matt Dockrey, Tomas

- **Main discussion was about hardware**
- Need to look more closely into these micro-ATX things(low power, dedicated hardware with a decent battery solution)[Tomas]
- About Robot(hardware)
 - Problems with current small robot (Pioneer 3-All Terrain)-
 - Low battery life
 - Wheels
 - Jumping rotations
 - Fragile
 - Power-bot (used for contest in 2007 - Vancouver)
 - Sturdy
 - Long battery length
 - Size is the only issue(need to confirm with organizers)[Dave]
 - Options
 - Buy a new Robot (possibly Pioneer 3DX - an indoor robot with castor wheels, or some other bot) (Dave updated since the meeting - asked Marius and confirmed there's no chance to get a WillowGarage bot in time)
 - With no on-board computer to save power
 - May be extra batteries
 - Use the old power-bot if this is allowed by organizers and shipping seems feasible
- New hardware(nice to have) [*Need someone to look at these*]
 - New Hokuyo laser can be helpful for detecting small obstacles and tables without long table clothes(may be using two lasers for better mapping)
 - New digital camera for better interfacing(Dave suggested a Nikon dx2 or something)
- We can also consider using laptop with GPU for vision computations.
 - Walter can give us a introduction to GPUs talk.[Walter]
- Getting Laptops Ready
 - Problems with interfacing bumblebee with Ubuntu 9.04
 - we might as well use 8.04
 - install and try[Ankur]
- High priority tasks(once we get the baseline system working on new installation)
 - System Architecture to base our system on(need to discuss on different modules and messages to pass)
 - To fit in feedback based multi-view(active recognition)
 - Better visualization