

Minutes of RSSC meeting Jan 12, 2007

Classroom

The classroom session at 11 am was presented by Jeff Dunker who continued his series of presentations on "handling uncertainty" with an overview of Fuzzy logic and Neural Networks.

Business meeting

At 12:30, Bruce Weimer kicked off the formal meeting in his first official act as the new club president.

It was suggested that we make another order of club name badges. Ken Matassa, who ordered them last time, said they are quite expensive in small quantities, but he would look into it. Bruce suggested that the main reason for the badges is so we could remember names from month to month and perhaps people could make their own badges.

A robot store (that is, a store that sells robot stuff, not a robot that is a store ;-)) called "Tin Man Robotics" is opening in Los Alamitos. The owner, Brian O'Neal was present and gave its address as 3451 Sausalito. Sausalito is just off Los Alamitos blvd and just south of Spring Steet. He hopes to be open by next weekend.

The classroom sessions for the next couple months will be:

Feb: Jeff Dunker will continue his "Handling uncertainty" series.

Mar: Steven Gentner will present "Genetic programming"

Jim Ubersetzig proposed a new contest. In the interests of developing robots that can plug appliances in or allow the robot to recharge itself, he proposes contests in incremental steps to reach this goal. The first level would be for robots to wander around a room (the room the club meeting is held in) and find a wall socket and stop next to it. Jim will put together some draft rules and post them on the mail list for review before the next meeting.

Contests for the year:

Feb: Line following

Apr: Wall following done with San Antonio college students

Jun: Wall sockets (Jim's contest)

Show and tell-

Bruce Weimer did a demo of one of his Christmas presents, a tiny radio control helicopter.

Terrence showed his son's science project (said his son only gave him two weeks to build it). It was a model elevator with motors, limit switches, counterbalance weight and cable tensioning.

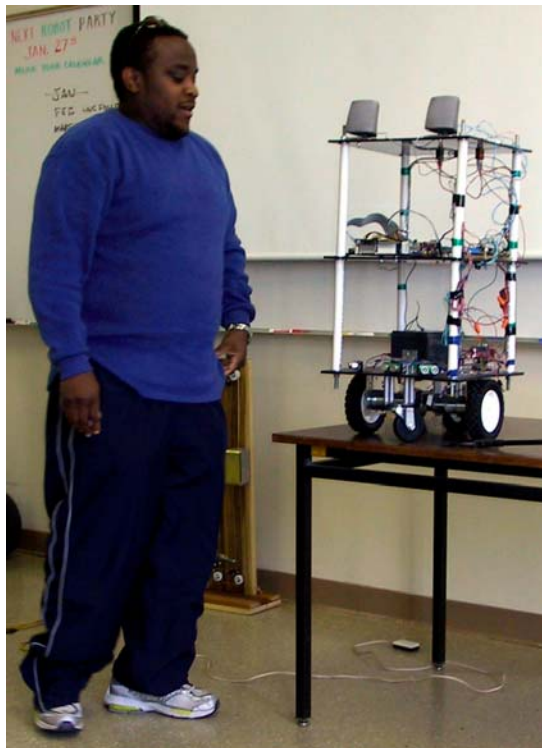


Martin Mason showed what he calls "Gripper Bot". It currently runs around on the floor randomly trying to grab something with large jaws he built from a picker-upper he bought at 99cent store.



Steven Gentner demonstrated a USB missile launcher (just google it) which fired up to three small missiles under laptop computer control. He had mounted a USB camera to the back of the missile launcher so it could be aimed and fired remotely.

Alex Brown gave a presentation of his Trinity firefighting robot from 2003.



Mike showed updates to his robot, now named "Dora" by his daughter. He demonstrated the drive system operating as controlled by an OOPIC and human controlled by activating bumper switches to demonstrate forward, reverse and turning motion. He has a mini-itx motherboard installed which will soon be doing the controlling.

Radio Shack speakers have been added to let the mini-

Mike Shanahan showed his LARGE 160 pound robot with 6 drive wheels. It rotates smoothly on the two center wheels since the rear wheels can be slightly retracted leaving most of the weight on the center. It turned with good precision and no rubber marks on the tile floor. It has a top speed of 9 mph and can run on battery for 2 hours.



Tim Sullivan presented his mechanical arm development fixture. It has a number of control panels and other features to facilitate developing and testing an arm along with room for commonly used tools. Hopefully, it will have an arm soon.



Jim Ubersetzig presented a method for determining position within a room using a laser emitter and sensor on the robot which rotates to look for three corner reflectors mounted on a wall. He says this method is being used by members of a couple other robot clubs since he published it a few years ago.