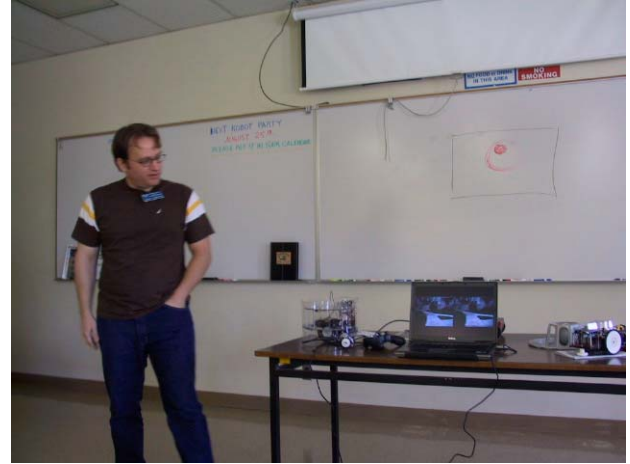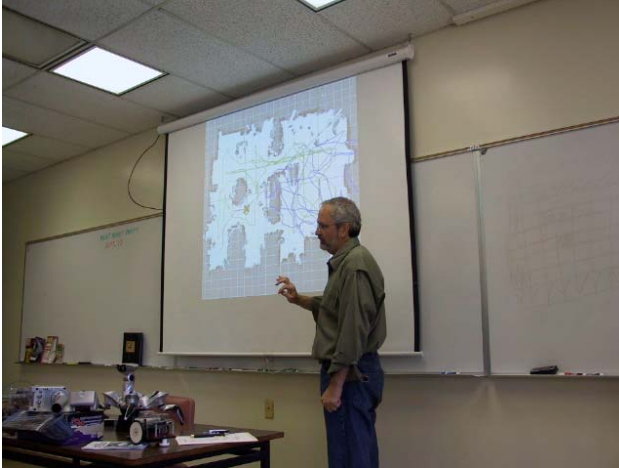# Minutes of RSSC meeting September 8, 2007

Classroom

Bruce Weimer and Steven Gentner continued their presentation on Localization and Navigation, emphasizing the use of visual data as well as the usual range sensors.

They covered:
  Scale invariant feature transform methods.
  Methods of depicting/storing maps
  Image stabilization and feature tracking in RoboRealm (RoboRealm.com)
  SLAM (Simultaneous Localization and Mapping)
  VSLAM(Visual SLAM)

Business meeting
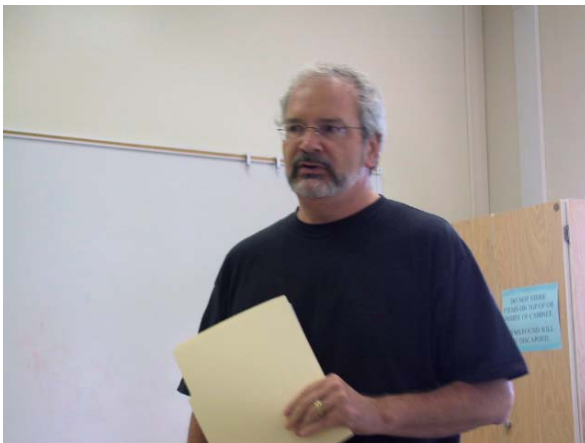
Upcoming contests will include:
  October: Hallway navigation contest
    For rules on this contest, see the Files
    Area of the mail list.

  November: Possible Sumo

  December: the annual Talent contest

Show and Tell

Bruce demonstrated an interesting critter from Hammacher Schlemmer that has an unusual gait as each of its four legs can pivot at the knees allowing it to translate in any direction as well as pivot .

James showed us a satellite antenna motor which he plans to use for a robotic application.

Derek Jones showed us some updates to his robot (the yellow one). He has added a new camera with a dedicated 68332 processor board, a Text to Speech synthesizer and an LED text screen.

Alex Brown gave an update on the recent changes to his Leaf robot called Rocky (Leafproject.org).

These include a new HP laptop which is running Windows Vista (and some of the challenges associated).

Also, it has a new auto-focus camera and a pan and tilt mechanism.
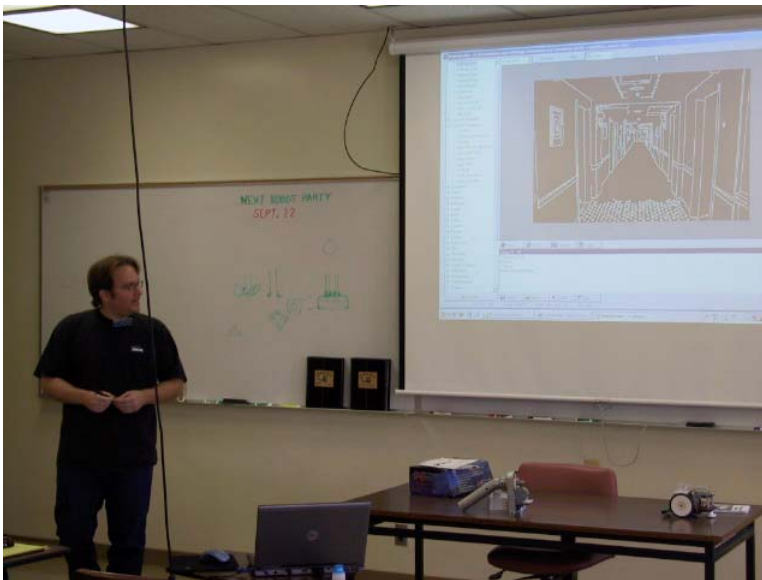
Steven Gentner gave a tutorial on how to use the new vanishing point feature now available on RoboRealm. (roborealm.com)

It provides X and Y coordinates of the apparent vanishing point of a room or hallway based on detecting converging edges as shown in the photo.