

Wednesday 20th February 2008

Contributed by RichardJones
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Christchurch Robotics Meeting: Wednesday 20th February 2008

The first meeting of the year attracted over 28 people, another good turn out with lots of new faces and an age range from 6 to, well I was too polite to ask. There were more youngsters in the group than ever before, so it may be worth considering whether we should lay on something especially for the really young ones. We are still fortunate to be able to use the Science Alive facilities and I am pleased to be able to give them a gold coin collection of \$33.80. Thanks for your donations, they are appreciated. I have booked the Science Alive Seminar Room for the third Wednesday of every even numbered month for 2008, but do check out our site <http://kiwibots.org> just in case of any late changes. I had a wonderful time, very educational, thought provoking and many of us found it hard to leave. Thanks to everyone for coming.

Attending Robots and Topics

I (Richard Jones) brought along the propeller proto board that I won at the last meeting. Added to my proto board were interfaces cribbed from the Parallax Demo Board. See their web site for the circuits for TV Video (NTSC/PAL), colour VGA, Stereo Sound, and Microphone. The demos from the Parallax software worked well showing off these interfaces. I also showed an ultrasonic demo that I put together from a copy of the microphone circuit with the 100k resistor changed to 5k6 to make it go much faster for the higher frequencies involved. The sender is driven from two port pins in anti phase, and receiver displayed the sound pulse varying in reception time on a scope style trace on the VGA monitor, the range is about 1m and could easily be extended. I'll post the code in a seperate email. By the next meeting I would like to have the ultrasonics and propeller chip mounted in a robot...

Carl also won a proto board at the December meeting and brought it along showing the VGA and PS2 keyboard interfaces running with a Sudoku game. Very nice, looked very polished and I'm sure lots of hours went into it. Thanks Carl. There are two more proto boards from the December meeting still out in the wild. Maybe we'll get to see them put through their paces next time.

William Wheelan (6) brought along his dad Stuart again. William talked us through how he and his Dad put together the soccer playing robot kits from DSE. He went on to give us a practical demo of the robots playing soccer under remote control. Thanks William for coming along and sharing your passion with us. Do come again if you can persuade your Mum do give you a late pass or persuade your Dad to run an earlier session!

Hanno brought along a plate of cookies and his Dancebot. Hanno gave us a fabulous presentation with insights into the complexities of getting a robot to balance on two wheels involving gyros, accelerometers and fuzzy logic, at the same time tempered with how much fun it will be to dance with when the camera gets going tomorrow. Sounds like it should Jive and ChaCha quite well if you have a belt buckle or 'T' shirt with a special pattern on it. We also got to see Hannos Viewport product in action demonstrating how to make the interfaces, maths and fuzzy logic visible on the Viewport screen while the robot was in action. Very cool.

Eric Cummins bought along another set of walking robot legs and a video of many sets of legs and a vast selection of assorted robots running around in his garage. These looked like serious beasts, a dinosaur, robots from old TV series, some shooting wooden pellets and balls. Some built to perform useful chores like pouring beer, sticking out tongues and shooting. Eric offered to have some of us round to see them close up. I'm keen. Here's the rub, Eric's walking bots walk with a many jointed gait and have no processors. Very smart indeed.

All told a very lively and interesting session. If I've missed anything or corrections are required just email the group. Thanks to all who came, and especially those who bought items to share like robots, techie demos or food.

Our next meeting will be on Wednesday 16th April 7.30pm in the Science Alive Seminar Room. Keep an eye on <http://kiwibots.org> for late breaking news. Photos from me and Hanno to follow.