

Hi everyone and welcome to the June Newsletter!

I am delighted that you are well into your CREST projects. I would like to keep in touch by email so please let us know of any email address changes.

There is a lot happening this year with CREST, and one of the developments is a **Venture Capital Fund** for students doing Silver and Gold projects. Basically they can apply to CREST to have some of the costs of their project covered – [click on the link on the CREST home page for more details...](#)

Another thing happening is the advent of **teacher workshops**. We want to provide more support to CREST teachers and are planning workshops around NZ, after school, for a couple of hours where teachers share what they are doing, ask questions of us, and support networks are set up... Keep an eye out for these happening in your area.

A plea: I would love digital photos of projects for the web. I would also need permission forms signed by students - and these are on the web: www.crest.org.nz under CREST materials.

As you know, we are putting CREST on-line this year and progress is good. It is designed to make everything simpler and faster. You will hear more about this as the year progresses.

Those of you who did Bronze last year - are your students doing Silver this year? and are last year's Silvers now doing Gold? The pay-offs are huge for them. To see how CREST slots into your Science or Technology programme, see the brochures on the CREST web site on the home page (links in first para).

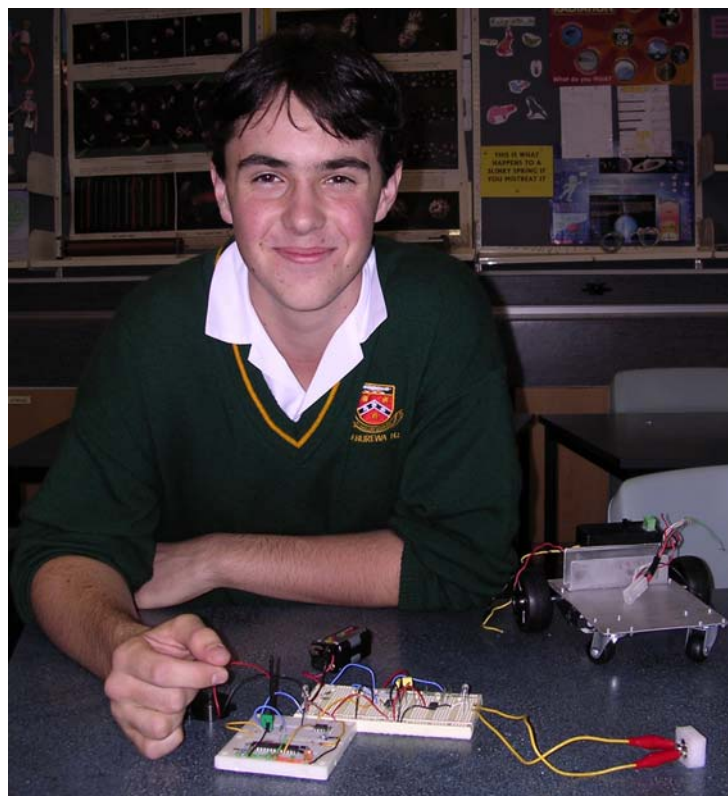
Good luck, and please contact us if you are having any problems or have any queries.

Update on Gold:

NavBot: An indoor navigation system

Matthew Richardson of The Manurewa High School is one of our new Gold CREST students for 2005. Matthew has a keen interest in things robotic and his choice of CREST projects reflects this. For his Silver CREST he conquered the age-old problem of having to mow the lawns with the invention of a robotic lawn mower.

Ever wondered what a major limitation of GPS is? Well, Matthew has and it is of course the fact that it does not work indoors. This fact got Matthew interested on working on a system that *would* work indoors. Think of the applications! You could direct a robot around a warehouse to



Matthew Richardson with his bread board prototype of the NavBot

collect goods or you could invent a see-eye robot to help people with limited sight navigate unknown indoor environments...

Matthew is using skills in mathematics, robot building and computer programming to develop a working prototype. We can't tell you how he intends to solve this problem right now, but watch this space to see what this bright young man will come up with!