

## Griffith University Computer Science Students develop O-Seti Software



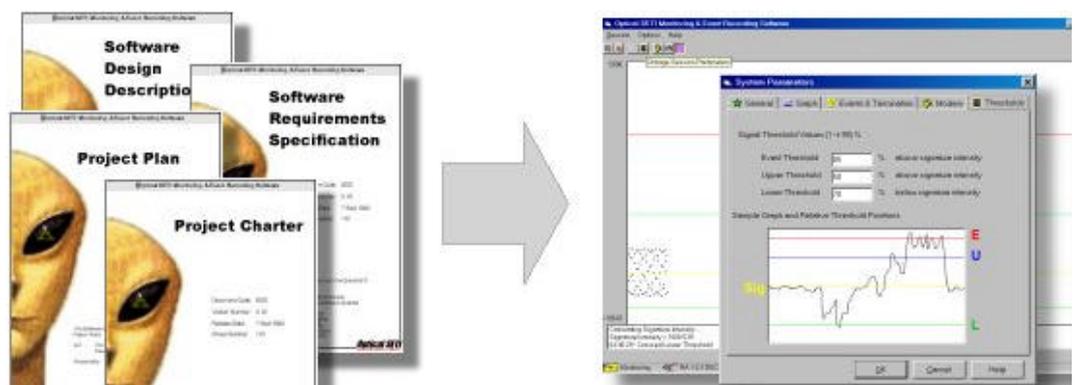
We were fortunate to have been given five students from the Griffith University Computer Science Department, to run a SETI Software development project this year. The Student team consisted of a group of individuals who were interested in the science of Seti, and actually get their degrees doing something they actually liked! What a way to get an education?

The team Members are: -

Jason Baker, Jodie Cheffins, Roger Greig, Corey Schuhen, Nathan Thom.

The task was to develop from scratch a Seti Optical monitoring system that we could run on an "IBM" computer using the Microsoft Windows 95 ~ 98- NT 4 operating systems. The software would need to interface to a sound card (Sound Blaster or compatible) and using a "Gismo" attached to an Optical Telescope, track and record / log events that could constitute the detection of an Optical (OSETI) event. T

The basis of the electronics was worked by one of our members, Mr. Hans Laroo. Hans was given the job of designing and building a detector that would sit at the focal point where the telescope's eye-piece would normally sit, in fact, the detectors photo-diode was mounted into the body of an existing eyepiece. The light field detected would provide a reference level into the circuit of an extremely stable oscillator circuit. The oscillators frequency was dependant upon the amount of signal coming from the telescope (light) and this formed a reference frame that we could store and compare at a later time.



We planned to observe all the stars within a radius of 100 light years for signs of optical variations compared to the reference frame we would have on file. This meant that we needed to observe all the targets at least once, to enable us to build up a database of reference frames. Once we had this database of reference frames we could do repeated measurements and comparisons

looking for variations in the frame compared to the database value. This meant that if there was a change from a previous run, we could be alerted to the change and study the target in more detail.

The students had to design a system in line with our needs and get it to a stage that the University system could evaluate and mark accordingly. Needless to say, the path from start to finish of this project took many months of meetings, paperwork and software development. The end result was a nice bit of programming from some nice people and they even got a great score from the University for their trouble. **High Distinctions I believe.** Great work Guy's (that includes you too Jodie)