

Brisbane's Griffith University helps design SETI Software

Earlier this year a group of students from Brisbane's Griffith University who were interested in our SETI project asked us if there was any part of the project they could help us with?

After a few meetings we came upon an idea that would be very helpful to our Project Argus efforts around the globe. We really need to have an integrated package that covers all areas of SETI operation from detection to recording the signal and then telling someone that there was a detection and someone should come to the Radio Telescope to check it out. The University thought that this project could be put forward as a 3rd year Computer Science programming project and so we got started on designing the specification for the integrated package.

Four students were given the task of implementing the specification into code and they got started trying to understand exactly what it was we wanted and then designing the computer programs that would do what we wanted.

There were four main requirements for the program.

- 1) Dual Channel Display for Spectrum being analyzed, Left = Upper Sideband & Left = Lower Sideband. Bandwidth of 25khz for each channel giving total Bandwidth of 50khz. A Fast Fourier Transform function utilizing the popular methods to display the data (hamming etc)
- 2) Software control of input levels (volume), display time in Sidereal (Astronomical Time), Show frequency of receiver that was being instructed to scan up and down the selected range.
- 3) Provide logging functions for the sound input being analyzed with other important information such as the sidereal time, frequency and amplitude of the "Hit".
- 4) A facility that allows the software to get in contact with the operator when the Radio Telescope is running in "unattended" mode and say the message "E.T.? Phone Home". The message needed to be sent either by phone or as email.

After we decided on the functionality of the package and that it was feasible to produce giving the level of the student's academic attainment the team got started.

Well, that was in April this year. Since then we have worked with the team from time to time assisting them with the fine tuning of the specification as they develop the package. To date we have received two Beta versions to test and they are on target to have Version 1.0 out by the end of February 1999.

We are grateful to the Griffith University for allowing their students to be involved with our project and at the same time earn their credits for their degrees.

Below is a Picture of the Programming Team. Left to right they are:-

1-Andrew Bruce

2-Shane McCafferey

3-Craig Dargusch



The fourth Member, Lee Nuttycombe could not be present for the Photo session.