Salaried Casual Job Opening

Spacecraft Close Encounter Analysis
User-Interface Development

How likely is it that a predicted close approach between two objects in Earth orbit will result in an actual collision? This is a fundamental question which spacecraft operators are faced with more and more frequently. To assist with this crucial task the Space Environment Research Centre (SERC) Ltd., whose headquarters are located on ANU premises on Mt Stromlo, is developing instruments as well as software that are aimed at increasing our understanding of predicted close approaches.

Your task will be to assist in the development of a software tool that allows interactively analysing a predicted close approach situation in an intuitive manner. The basis for this is a graphical user interface incorporating OpenGL. The aim is to present details of a predicted close approach along with precomputed information. This will allow a user to quickly gain a sound understanding of the likelihood for a specific close approach to result in a collision.

Your gain (apart from money earned) will be insight into issues relating to spacecraft operations in an increasingly congested Earth orbit environment including fundamentals in astrodynamics and experience in user-interface design in Qt and OpenGL.

What you should bring? Curiosity and an interest in gaining experience in OpenGL applications and Graphical User Interface development with practical application.

Hours per week? Duration of appointment? A minimum of 20 hours per week would be preferable. The employment should go at least until end of Semester 2 (mid October).

Location? SERC offices are located in ANU's AITC2 on Mt Stromlo. Student can work at SERC offices (preferred). Alternatively, work can be performed off-premises with weekly meetings on premises.

Interested or know someone who may be? Simply email me at svenflegel@serc.org.au.

Application deadline: August 13, 2018