



Jupiter Program: The Andy Thomas Space Foundation EOS Space Systems Research Awards

Applications are now invited for the Andy Thomas Space Foundation EOS Space Systems Research Awards.

Three prizes worth up to \$10,000 are available for researchers or doctoral candidates currently enrolled in an Australian university.

Applicants must be Australian citizens and special consideration will be given to eligible Australians with an indigenous background, female applicants and applicants from rural or regional areas.

Overview

EOS Space Systems are global leaders in the design, manufacture and delivery of sensors and systems for space domain awareness and space control. For over 35 years, EOS have provided international expertise in space debris monitoring and management. For more information see www.eos-aus.com/space. In partnership with the Andy Thomas Space Foundation, EOS encourages applications from Australian masters or doctoral candidates to apply for a Foundation-EOS research award in any of the following areas (Note: topics from other areas of space science will also be considered if they align with current research interests of EOS):

- Novel algorithms for satellite behavioural analysis using ground-based imagery
- Decision support systems for space domain awareness
- Astrodynamics
- Optical communications
- Next-generation high energy lasers for space debris tracking
- Optimised satellite constellation design for optical communications platforms (in Earth, Moon, or Mars orbit)
- Efficient algorithms for a smart sensor network (AI-controlled sensor network)
- Characterisation of and compensation for optical transmission through the turbulent atmosphere and
- High accuracy range-finding systems.

Specific Requirements

Applicants are required to submit a short (maximum 6 pages) research project proposal outlining their motivation, expected results and discuss the potential impact the project may have on the space science community. Projects with clear demonstrable practical applications or which present novel theoretical frameworks will be strongly considered. In addition, applicants should attach a copy of their CV outlining their space-related knowledge, achievements, and academic record.

The proposals will be assessed on the following criteria:

1. Novelty and practicality. Projects should present a novel approach to solve a problem with a practical implementation period of less than 5 years [30%];
2. Clarity. The project should be clearly explained within the specified page limit [30%];
3. Contribution to the field of space science research and engineering [40%].

Timeline

- 18 March 2022 – Applications open
- 27 May 2022 – Applications close (must be received by midnight CST)
- 10 June 2022 – Successful recipients notified

Submission content and format

The application must include:

1. A completed application form

- To download the application form or complete the application on-line, go to

<https://andythomas.foundation/applications/>

Please keep a record of your Application Keyword

2. A research proposal (maximum 6 pages)

- Please see **Specific Requirements** above

- To upload in PDF format, go to <https://andythomas.foundation/applications/> and enter your Application ID from step 1

OR email the document in PDF format to educationfund@andythomas.foundation quoting your Application ID from step 1

3. A copy of the applicant's academic transcripts

- To upload in PDF format, go to <https://andythomas.foundation/applications/> and enter your Application ID from step 1

OR email the document in PDF format to educationfund@andythomas.foundation quoting your Application ID from step 1

To be considered, completed applications must be lodged before midnight SA time on the closing date set out above.

Selection process

A selection committee will review and short-list recipients. The selection committee will consist of representatives from the Foundation and EOS.

Publicity

The Foundation reserves the right to publish information about successful applicants as set out in the personal application documents Foundation.

The successful applicant agrees to complete both a written and recorded (video recording) testimonial/ reflection of the program following their completion or as requested by the Foundation. These testimonials are able to be used in all printed and virtual media published by the Foundation.

The successful applicant agrees to complete a short survey at the commencement and completion of their program to provide feedback to the Foundation

More Information

If you need further information or have particular questions, please email: educationfund@andythomas.foundation