



## Job Opening

### Student Assistant (m/f/d) (Bachelor or Master)

Manufacturing in Space JRG at the IRAS has initiated education and research in a novel study that attempts to realize the concept of 'Warehouse in Space'. Currently, the space-bound structures and systems are overdesigned to withstand launch loads while being accommodated within limited volumes of the rocket fairings. This adds engineering complexity which is frequently accompanied by failures. The concept of 'manufacturing in space' bypasses this complexity by carrying only the pertinent raw material and then build the desired structures and system in space, optimized to only sustain necessary loads. Thus, making the entire process resource efficient and cost effective. Although space ambient environment poses its unique challenges e.g. vacuum, micro-gravity, etc., it also provides opportunities. Our JRG aims to explore these opportunities while circumventing the environmental challenges.

Ability to 3D-print, assemble and integrate using **a robotic arm** is being deemed as a possible modular solution for operations and servicing in orbit. As a part of this position the student assistant is expected to support 3D printing and automated robotic assembly in space ambient environment. They will shoulder multidisciplinary responsibilities including operational support, maintenance, documentation and administration.

#### Tasks:

- Operational support, and maintenance of existing apparatus at IRAS
- Hardware, software integration and experimental demo
- Misc. administration support for coursework

#### Requirements:

- Systematic working approach and motivation to support space research
- Familiarity with 3D printing, robotics and control system

Start date: As soon as possible

Application deadline: Until the position is filled

If you are interested, please contact Aditya Thakur.

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Severely disabled applicant will be given preference in the event of equal suitability. Proof must be enclosed. Furthermore, the Institute aims to increase its proportion of women and therefore strongly encourages women to apply. Applications from people of all nationalities are welcome. Personal data will be stored for the purpose of conducting the application process.

The personal data will be stored for the purpose of processing the application. By submitting your application, you agree that your data may be stored and processed electronically for application purposes in compliance with the provisions of data protection law. Further information on data protection can be found in our data protection regulations at <https://www.tu-braunschweig.de/datenschutzerklaerung-bewerbungen>.

Application costs cannot be reimbursed.