## Job Opening

Student Assistant in the In-Space Manufacturing Working Group (m/f/d, Bachelor or Master)



Figure 1: Setup for metallic truss fabrication using a UR10 robotic arm and a TIG welding machine as a heat source.

Current trends in space flight, such as the space-based solar power concept, place new demands on the construction of space structures. Manufacturing structures in orbit circumvents the volume, mass and load restrictions dictated by launcher fairings, max. launch mass and acting forces during launch, enabling the construction of theoretically infinitely long, lightweight structures. To enable this vision, new manufacturing methods and materials need to be developed. To address this, an additive manufacturing setup for metallic truss structures has been built at TU Braunschweig's Institute of Space Systems.

The In-Space Manufacturing group is looking for a student assistant to support with improvements and calibration of the setup with up to 40h per month.

## Tasks:

- Assisting in improvements of the setup and implementation of new components
- Commissioning of hardware
- Maintaining and expanding the control software in Python

- Assisting in testing and sample manufacturing
- Creating and maintaining the relevant documentation

## Requirements:

- Enrolled in a degree program (bachelor/master) in Mechanical Engineering,
  Electronics, Mechatronics, Aerospace Engineering, or similar
- Knowledge of Python
- Experience with Linux and ROS are preferred
- Systematic and independent working approach

Please submit your application by December 19th, 2025 via e-mail to <a href="mailto:n.kyriazis@tu-braunschweig.de">n.kyriazis@tu-braunschweig.de</a>.

Severely disabled applicant will be given preference in case of equal suitability. Proof must be enclosed. Furthermore, the Institute strives to increase its percentage of women and therefore strongly encourages women to apply. Applications from people of all nationalities are welcome.

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 <a href="https://www.tu-braunschweig.de/datenschutzerklaerung-bewerbungen">https://www.tu-braunschweig.de/datenschutzerklaerung-bewerbungen</a>. Application costs cannot be reimbursed

Contact: Niklas Kyriazis, M.Sc.

Tel.: 0531 / 391-9971

E-Mail: n.kyriazis@tu-braunschweig.de

Hermann-Blenk-Str. 23, 38108 Braunschweig