IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)

Enabling the Future - Developing the Space Workforce (5)

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CONTRIBUTION OF STUDENT-RUN ORGANISATION FOR DEVELOPING THE SPACE WORKFORCE: IMPACT, EXPERIENCE, AND PRACTICES FROM THE GIRON SPACE ORGANISATION IN NORTHERN SWEDEN

Abstract

The growing global space market is in constant need of a skilled workforce; in turn, companies and agencies often prioritize hiring graduates who possess not only excellent subject knowledge, but also understand the modern working methods, have professional skills in problem-solving and communication, and other qualifications which are closely related to the industry experience. The development of these qualifications can be achieved through an active involvement of a rich ecosystem including international academic, industrial, and business partners, together with a flexible combination of formal, informal, and non-formal educational forms.

Northern Sweden possesses a dynamic space ecosystem that is rapidly expanding across several different fields, bringing many more opportunities for the students of Luleå University of Technology (LTU) to develop their professional competencies and skills. One important actor in the Kiruna space ecosystem is the student-run Giron Space Organisation (GSO), created in April 2021. GSO operates independently of the university and acts as an umbrella organisation for current and future student projects at LTU's Kiruna Space Campus. It seeks to complement the university educational activities and support students' professional development. In addition, GSO actively works with financial sponsorships from regional businesses and alumni communities.

Incorporating student projects into the unique environment of the space ecosystem creates a stable platform for upstream innovation in the region, ensures cohesiveness of the student projects, facilitates

student professional experience, and enhances personal learning networks. This review details organisational structure and governance, implemented practices, and lessons learned. Additional discussion of how the student-led organisation contributes to the structural development and sustainability of the complex space science and technology ecosystem in Northern Sweden is included. Thus, providing broader opportunities to prepare a highly qualified future space workforce, who is capable of addressing global challenges and promoting the New Space agenda.