

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
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Author: Mr. Andreas Hornig  
University of Stuttgart, Germany

Prof. Dieter Fritsch  
Institute for Photogrammetry (IFP), University of Stuttgart, Germany

NASA'S INTERNATIONAL SPACE APPS CHALLENGE: 6 YEARS OF GLOBAL HACKATHON  
WEEKENDS FOR INNOVATION INCUBATION FROM THE LOCAL PERSPECTIVE OF  
STUTTGART, GERMANY

**Abstract**

The International Space Apps Challenge is an international mass collaboration focused on space exploration. It is an annual event and it takes over 48-hours in cities around the world. The event fosters collaborative problem solving with a goal of producing relevant and innovative open-source solutions that addresses global needs applicable to both life on Earth and life in space. NASA is organizing this global collaboration event and invites a number of government collaborators and local organizing teams across the globe. It serves as an innovation incubation programme for NASA and its partners and, due to its open-source nature, also beyond.

Since its first Space Apps held in April 2012, the local Space Apps event in Stuttgart, Germany, attracted space enthusiasts from the local and regional maker scene and students from the University of Stuttgart and University of Tübingen. The paper describes the various methods to foster innovative ideas for software as well as hardware solutions in interdisciplinary teams and a makerspace environment. Furthermore it will show long term effects that reached beyond the initial 48-hours of the the challenge.

In the current wake of change within the space industry, the NASA Space Apps Challenge is a great advantage for external people to find a way into the space sector, and for professionals inside the space sector to learn first hand experiences in design sprints and other agile development forms like rapid prototyping and MBPs (Minimum Valuable Products). Furthermore the paper will show the local characteristics of such an incubator event in Germany.

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