Institute for Measurement Systems and Sensor Technology
Department of Electrical and Computer Engineering
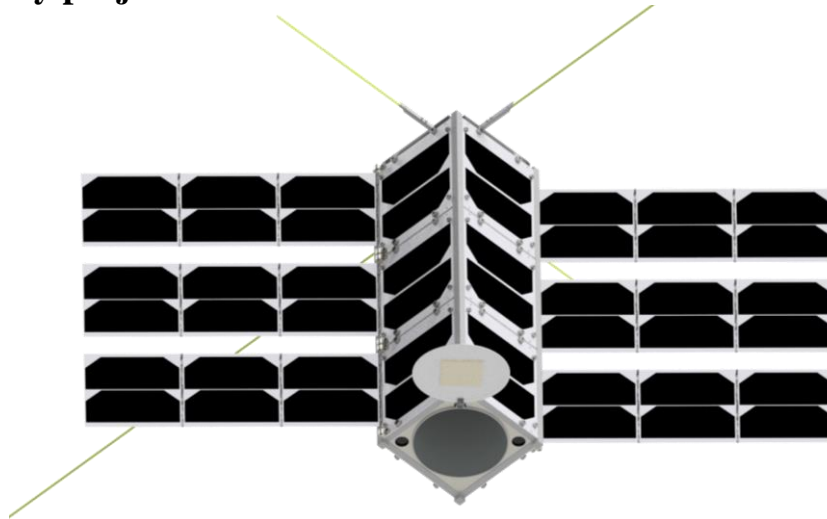Technical University of Munich

TUM

Bachelor- / Master thesis / Research Practice / Project Laboratory Course / Interdisciplinary project / Advanced Seminar

Development of the future weather satellite

Background

Precise weather forecasts rely on high-quality satellite images. Today's few large weather satellites provide either global coverage or high frequency. We will do both. Our constellation of CubeSats will scan the planet several times per hour at a resolution of ~200m/px and provide high-definition data with automated change detection. Each CubeSat (picture above) will measure 34 x 10 x 10 cm^3 (3U) and will house an advanced thermal camera to measure surface temperatures and clouds.

Team

You will be working in a very dedicated and highly motivated team of experts in the fields of optics, electronics, spacecraft and software engineering. We are using modern tools like Gitlab and Slack and are open to adopt everything new and efficient. Most of our team previously worked on the MOVE-II CubeSat and the MOVE-ON high altitude pseudo satellite project at TUM chair of astronautics.

Field of work and Requirements

We have several openings for optics experts, physicists, software and mechanical engineers, business experts and everyone else who is highly dedicated to work in a fast-growing space startup. Pass by or send an email and tell us about what you know, what drives you and what you would like to learn!

Benefits

- Free Coffee, Cappuccino and Club-Mate while working at the institute
- Permanent employment as working student or full-time at the spin-off after the end of your thesis is possible
- You will work on a real satellite which is launched into outer space! Seriously.

Organisational details

The work will be conducted at the Institute for Measurement Systems and Sensor Technology (MST) at the Technical University of Munich (TUM) in cooperation with the EXIST funded spin-off project Orbital Oracle Technologies (www.ororatech.com).

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