

Eurac Research is looking for a

MSc thesis / trainee for multi/hyperspectral applications (m/f)

German title	Trainee/master student für multi- / hyperspektrale Anwendungen
Italian title	Tirocinante per applicazioni multi / iperspettrali

Short description of the position/project:

Eurac Research [www.eurac.edu] is a private non-profit research center established in 1992 with headquarters in Bolzano, located in the north of Italy. The main objective of the Institute of Earth Observation, in collaboration with the Center for Sensing Solutions, is to monitor and understand key environmental dynamics and related climate / disaster risks in sensitive mountain regions by integrating remote sensing techniques with interdisciplinary approaches. Within the research field vegetation and land use dynamics we explore the potential of hyperspectral data which we acquire with our unmanned aerial vehicle (UAV) and our portable spectroradiometer to monitor vegetation types and conditions in eroded areas.

In this context, we are looking for a highly motivated student who supports our activities and develops approaches to map vegetation types based on hyperspectral data. The trainee period shall be ideally used to develop a research concept for a subsequent master thesis.

Tasks:

- To analyze and review the current status in hyperspectral approaches within the field of monitoring vegetation and soils in eroded areas
- To support at least two field campaigns to acquire hyperspectral data (spectroradiometer and drone flights) on eroded areas in South Tyrol
- To organize, (pre)process and prepare the data collected during the field campaigns
- To assess the variability of spectral signatures of plant species
- To develop a workflow for mapping vegetation types for the study regions

Technical and personal skills/expertise:

- University degree in Environmental sciences, Geosciences, applied physics or comparable field of study
- Basic experience in multi-/hyperspectral applications
- Good knowledge of remote sensing software and at least one programming language
- Basic GIS skills (e.g. QGIS, GRASS or ArcMap)
- Ability to work in a team, good communication skills, motivation to learn and personal engagement
- Very good English (+ good German and / or Italian desirable)

We offer:

- An interesting, autonomous position in a young international and interdisciplinary team
- State-of-the-art technical facilities (soft- and hardware, communication tools)
- The contract shall start as soon as possible and will be issued for a maximum of 6 months

How to apply:

Interested candidates should submit their application (CV, cover letter and further relevant documents in digital form) within **15.04.2019** to the following address:

Eurac Research, Center for Sensing Solutions

Viale Druso 1, 39100 Bolzano (Italy)

Email: sensing.solutions@eurac.edu, T +39 0471 055 930, F +39 0471 055 949

For further information please contact *Racheline Bonadio*

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Please attach, after reading the [privacy policy](#) in compliance with the EU Regulation No. 2016/679 (GDPR) and the national legislation, the following consent to your personal record: *'I have read the privacy policy under <http://www.eurac.edu/en/aboutus/Jobs/Pages/default.aspx> and hereby authorize Eurac Research to use my personal data in accordance to EU Regulation No. 2016/679 and national legislation.'* We inform you that we will not be allowed to consider any application without this compliancy declaration.

Please add the following consent if it is of interest to you: *"I hereby explicitly authorize Eurac Research to store my personal data for the purpose of being contacted for potential future job openings"*.