The Leibniz Centre for Tropical Marine Research GmbH (www.leibniz-zmt.de) is an independent research and teaching institute that provides scientific knowledge for the protection and sustainable use of tropical coastal ecosystems. To this end, we work in an inter- and transdisciplinary manner with our partners in the tropics. The ZMT is a member of the Leibniz Association.

The Data Science and Technology working group is seeking to fill an opening for

**Data Scientist for Ecosystem Mapping (gn)**
(Reference: 25-DigiZ)

You will play a leading role in developing innovative ecosystem mapping tools for ZMT which can handle large-scale data from both remote (satellite) and proximal (drones and underwater) survey data. The development of these tools should be capable of handling large volumes of global data, handle new incoming data streams and producing georeferenced outputs of habitat and ecosystem maps. The detection of ecosystem features, such as organisms, habitat structures, etc, in coastal forests and coral reefs will be a primary focus. The developments are expected to support ecological analyses with specific research hypotheses and explorations, as well as broader modeling efforts. You will be expected to develop and maintain collaborations with other researchers within and beyond ZMT, which includes supervision of any attached student projects. Leveraging the new developments and research analyses, you will lead or contribute to the production of scientific manuscripts to push the state-of-the-art in ecosystem monitoring.

**Your tasks:**
- Development of ecosystem mapping capabilities from large-scale remote and proximal survey data
- Develop innovative cloud-based ecosystem mapping tools
- Develop workflows for analysing multispectral images for information extraction
- Support ecological and modelling research work
- Manage scientific projects and collaborations within and beyond ZMT
- Prepare scientific manuscripts for peer-reviewed publications
- Supervise student projects attached to the work

**Requirements:**
- Doctoral degree (or almost completed) in quantitative ecology, data engineering, geosciences or a related discipline
- Demonstrable working experience (3+ years) with spatial mapping of marine habitats
- Demonstrable working experience (3+ years) with deep learning techniques for image processing
- Strong skills in collaborative software development (python, git, etc) and cloud computing technologies (HPC clusters or commercial)
- Profound knowledge of issues relevant to marine habitats such as coral reefs or mangrove forests
- Practical knowledge of photogrammetry will be an advantage

**Further information:**
For questions please contact Dr. Arjun Chennu, email: arjun.chennu@leibniz-zmt.de

**Details of position:**
Salary will be paid according to the German TV-L (EG 13). The position is available for a full-time employment starting January 1st 2024 for 36 months. ZMT is an equal opportunity employer. Applicants with a migration background are welcome. Disabled persons with comparable qualification receive preferential status. The ZMT values its diverse workforce and pursues the goal of providing equal opportunity, which incorporates gender neutrality (gn). We will be happy to accept your documents without a photo.

We offer:
- A dynamic, interdisciplinary and international environment
- Interesting, versatile and challenging tasks
- Family-friendly working conditions with certification by the Work and Family Audit
- Diverse health promotion measures

Submission of application:
Please submit your CV including publication list, a brief statement of motivation, and a 1-page sketch of research ideas, and the names and contact information of two referees by 08.11.2023 as a single pdf file with the reference number “25-DigiZ” to Ms. Carina Seemann, email: bewerbung@leibniz-zmt.de.

Leibniz Centre for Tropical Marine Research, Fahrenheitstraße 6, D-28359 Bremen.