



The Institute of Baltic Sea Fisheries of the Johann Heinrich von Thünen Institute, Federal Research Institute for Rural Areas, Forestry and Fisheries, in Rostock offers a full-time position (39 hours/week) at the earliest possible date, limited until 30.09.2027, a

**researcher (f/m/d)**  
software development / computer science

for the contribution to the third-party funded project "smartFishing2" in the future cluster "Ocean Technology Campus Rostock". The project is developing the foundations for a robust underwater camera system with AI-supported image recognition for use in commercial fishing and fisheries research.

The Thuenen Institute of Baltic Sea Fisheries in Rostock is developing the scientific basis for the sustainable use of fishery resources in the Baltic Sea. This includes the assessment of the stock structure and productivity of fish stocks, the collection of data from commercial fisheries, the development of methods to minimize the impact of fishing on the marine ecosystem and the development of technology for monitoring the marine environment.

Following on from the BMBF-funded "smartFishing" project, the overarching aim of the "smartFishing2" project is to further develop an optical underwater sensor system for the in situ detection and classification of marine organisms. It is to be used directly in fisheries and marine ecology research, as well as forming the basis for further applications and technology developments.

**Tasks:**

- further development of the system and corresponding data collection and analysis
- design and development of a software framework for camera-based biological data collection
- research into the usability of existing technical resources
- testing the system on board research and fishing ships
- documentation and presentation of results (project reports, publications)
- testing of the system on board research and fishing vessels
- documentation and presentation of results, e.g. in project reports and collaboration on scientific publications
- Cooperation with project partners

In addition to project work, we open up and support cooperation with national and international research and development groups.

**We expect from the applicant the following qualifications:**

- completed degree (Univ.-Diploma, M.Sc.), in particular in an engineering or technical course of study (e.g. from the fields of computer science, mechatronics, mechanical engineering, electronics), or with sufficient experience in other courses of study
- good knowledge of software development with common programming languages, such as Python
- proven experience in one or more of the following areas:
  - 2D and 3D image processing, in particular object recognition and object tracking
  - Machine learning, classification, deep learning, pattern matching
  - GUI design
  - Open source software
- Class B driving license and willingness to drive a company car
- Basic knowledge of German as well as good written and spoken English is an advantage



**Personal qualifications:**

- a high degree of teamwork and communication skills, motivation, organizational skills and a wealth of ideas
- an analytical and conceptual way of thinking
- enjoyment of practical work
- physical ability to work at sea (seaworthiness, lifting and carrying crates, equipment, fish boxes, etc.),
- willingness to participate in service and sea voyages lasting several days and, due to the sometimes short planning times, a high degree of flexibility and commitment

**We offer** a highly interesting job in applied research on the interface between science and management of fisheries, often with strong echoes in the media, which provide the basis for a sustainable management of fish stocks; a well-equipped, modern workplace, a large degree of freedom and intense interdisciplinary and international collaboration.

We support the compatibility of work and family life and have been awarded the audit berufundfamilie certificate. In order to support compatibility, the Thünen Institute offers flexible working time models, home office and teleworking, among other things, within the scope of the official possibilities. Part-time work is generally possible.

The employment is governed by the German Wage Agreement for Public Services (TVöD-Bund). The tasks are evaluated according to pay group 13 TVöD, so that if the collective agreement and personal requirements are met, the classification is made according to pay group 13 TVöD in application of the TV pay scale (federal government).

The Thünen Institute promotes professional equality for women and men and therefore expressly welcomes applications from women.

Should you have questions regarding the scientific requirements etc., please address your inquiries by email or telephone to Dr. Daniel Stepputtis (daniel.stepputtis@thuenen.de ; 0531/25701271).

If you have an international degree, please also enclose a certificate evaluation from the Central Office for Foreign Education (ZAB) with your application. If you do not yet have a certificate evaluation, you must apply for one if your application is successful. You can find further information at <https://zab.kmk.org/de/zeugnisbewertung>

Send your applications in German or English, combined in **one single pdf file**, including your CV and copies of your certificates and at least two references as well as, if available, publications, using the keyword **“2025-036-OF”** until **09.04.2025** if possible by e-mail to

**of-bewerbungen@thuenen.de**  
Thünen-Institut für Ostseefischerei  
Herrn Dr. C. Zimmermann  
Alter Hafen Süd 2, 18069 Rostock

Information in accordance with Article 13 DSGVO on the collection of personal data can be found at [www.thuenen.de/de/thuenen-institut/karriere](http://www.thuenen.de/de/thuenen-institut/karriere)