The Institute for Visual and Analytic Computing at the Faculty of Computer Science and Electrical Engineering at the University of Rostock has a vacancy for a

Junior Professorship for Visual and Analytic Computing in Ocean Technologies
(salary level W1 with a tenure track for a W2 professorship)

The employment will be for a period of three years, subject to fulfilment of the general civil service requirements. An extension for a further three years is planned in case of a positive evaluation. After the expiry of the fixed term, the transfer to a W2 professorship is planned within the framework of the relevant legal provisions.

The core of the W1 professorship is the research of algorithms at the interface of the research areas of visual computing (esp. imaging methods, visualisation) and analytic computing (esp. machine learning, algorithmic data analysis). An important focus is on the analysis of high-dimensional, continuous, and time-varying data in the maritime application context. With a special focus on real-time requirements, methods of visual and analytical computing are to be developed and combined in a targeted manner to improve the knowledge gained from large and complex multimodal data. The development of such methods provides important foundations for comprehensive application possibilities in the fields of offshore technology, oceanography, underwater robotics, marine ecology, and fisheries/aquaculture.

To strengthen research and teaching in this context, we are looking for a junior scientist with theoretical and practical background in the methodological fields of computer science, who can point to own methodologically oriented research results in at least one of the following research fields:

- Visualisation of high-dimensional and multimodal data sets
- Imaging methods based on multimodal sensor technology (e.g., acoustic, optical, magnetic, etc.)
- Machine learning on sensor data (e.g., segmentation, object recognition, etc.)
- 3D reconstruction for data and point clouds from sensor-based data sources
- Real-time processing of multi-dimensional time series with a focus on hydroacoustic or comparable data
- Sensor fusion of optical and acoustic data streams
- Data-driven modelling and simulation

The relevance and transferability of previous research to the maritime application domain is mandatory and should be suitably presented in the application.

The advertised professorship fits into the expansion of the research capacities of the University of Rostock on digital underwater technology and thus flanks the development of the Ocean Technology Campus Rostock. The research is to be carried out in close cooperation with Fraunhofer IGD and its Digital Ocean Lab, which is currently being established, as well as the Department of Maritime Systems of the Interdisciplinary Faculty of the University of Rostock. Personnel and material resources of approx. 1 million € are available for the professorship until at least 2025 for the establishment of its own research group.

In addition to the above-mentioned thematic orientation, experience in the acquisition and implementation of third-party funded projects as well as experience in teaching are desirable. We also expect the future holder of the
position to participate adequately in the subject-specific degree programmes as well as in the undergraduate teaching of the Department of Computer Science.

For further inquiries, please contact:
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Qualifications are as per § 62 of the Higher Education Act of the State of Mecklenburg-Vorpommern (LHG M-V).

The professorship is to be filled according to § 62 LHG M-V as a regular state employee. Pursuant to § 62a LHG M-V, the appointment to the junior professorship is linked to the promise that a professorship in the civil service status for life or as a regular state employee will be accepted if the individual defined performance requirements are met during the junior professorship. Before the end of the second phase of the junior professorship, a tenure track evaluation is carried out in order to check the prerequisites for taking on the permanent W2 professorship. According to § 62 (2) LHG, an interim evaluation takes place in the course of the third year of the junior professorship.

The University of Rostock is committed to their university management guidelines.

Equal opportunities are part of our personnel policy. The announcement is therefore aimed at all persons regardless of their gender (*gender-neutral). Disabled applicants will be given preference if all other qualifications are essentially equal.

The University of Rostock is especially interested in promoting women within the context of § 7 (3) of the Gender Equality Act, and therefore specifically encourages applications from qualified women. Women will be given priority if their qualifications are essentially equivalent, unless reasons attributable to the person of the competitor predominate.

Applications with the usual documents (full CV, a complete list of academic and professional background, publications, teaching experience, certificates, any additional qualifications, a summary of grants and sponsored research activities and a description of future research plans) should be sent no later than 31st January 2023 to the University of Rostock, Dean of the Faculty of Computer Science and Electrical Engineering, Albert-Einstein-Straße 26, 18059 Rostock or preferably by e-mail to berufungen.ief@uni-rostock.de (please all documents in one PDF file). We would like to point out that your e-mail will be sent to us unencrypted.

The protection of your personal information is very important to us. Therefore, the data collected during the application process will be collected, processed and used in accordance with the relevant data protection rules.

Application costs cannot be reimbursed by the State of Mecklenburg-Vorpommern. We ask you to submit applications only in copy, as they will not be returned after the procedure has been completed.