PRE-Advertisement

Senior Lecturer in Information Visualization and Visual Analytics

Placement: Linnaeus University, Växjö, Sweden (https://lnu.se/en/)
Scope of appointment: 100%, permanent
Planned date of official advertisement: Winter 2022/23

Welcome to Linnaeus University! We meet the societal challenges of today and tomorrow in a spirit of openness, curiosity and creativity. By creating arenas for exchange of knowledge from different subjects, fields and cultures, we open up for new ideas and create new opportunities for long-term sustainable societal development. Linnaeus University – where people grow.

The Department of Computer Science and Media Technology is responsible for many educational programs at basic and advanced levels within computer science, software development, and media technology. Currently, more than 60 staff members work in the department. The department has a strong connection with other departments of Linnaeus University.

The position **to be advertised** will be affiliated to the information visualization research group (ISOVIS) led by Professor Andreas Kerren (see https://cs.lnu.se/isovis/). The research group mainly focuses on the explorative analysis and visualization of typically large and complex information spaces, for example in biochemistry, humanities, or software engineering. Our vision is to attack the big data challenge by a combination of human-centered data analysis and interactive visualization for decision making. These research topics are highly relevant for academia and economy as both science and industry make increasing use of data-intensive technologies.

Job tasks:
The work duties include the whole research cycle, i.e., from literature reviews and the identification of research challenges, throughout the implementation of visualization tools and performing user studies, to reporting of results and publication in highly-ranked journals and conferences in the areas of information visualization and visual analytics.

In addition, the position holder will teach in courses at different levels (incl. course administration and supervision of thesis projects), be involved in syllabi and curricula development, and be responsible teacher for courses. The teaching tasks relate to subjects of the ISOVIS research group, as well as to more general courses in computer science and software development.

The position also involves co-supervision of doctoral students, active participation in the operational work and development of the ISOVIS research group, and attracting external research funding.

Requirements:

Applicants must hold a PhD degree in Computer Science or a closely related field or have corresponding research expertise. They must also have demonstrated teaching expertise. Teaching expertise includes, according to the Linnaeus University appointments procedure, planning, implementation, evaluation of teaching, and supervision and examination.

The assessment criteria for appointment as a senior lecturer shall be the degree of expertise required as a qualification for employment. As much attention shall be given to the assessment of teaching expertise as to the assessment of other qualifying criteria. Eligibility for this position also requires that the doctoral thesis has a major focus on information visualization, visual analytics, or closely related areas such as human-computer interaction.

Assessment criteria:

We require research and teaching experience in Information Visualization and/or Visual Analytics; related areas (e.g., Machine Learning, Data Science, or Computer Graphics) are also desirable. Experience with visualization- and data science-related programming languages and libraries (e.g., Java, JavaScript, WebGL/OpenGL, Python, or Scikit-Learn) is substantial for this position; a solid training in mathematics and computer graphics will be considered a plus. The candidate should have skills for the development and maintenance of web-based visualization tools, for example: D3, Plotly Dash, MongoDB, WebSockets, and/or Unix-based server architectures.

Further assessment criteria are documented expertise within at least two of the following research/educational topics:

- Visual text analytics
- Multidimensional visualization techniques in combination with machine learning and/or data mining techniques
- Visualization of networks
- Integration of visual analytics approaches with computational models incl. eXplainable AI
- Experiences in visualization applied to specific application domains which are focus areas of the group and department, such as (digital) humanities, social or life sciences, and engineering.

Excellent written and oral communication skills in English are required, preferably documented in the form of papers published in well-known journals and/or presented in well-known conferences in the area of Information Visualization and/or Visual Analytics. Teamwork experiences, such as previous work in national/international research projects, should also be documented in the application. Active involvement in writing grant applications is also considered as meriting, as well as experience in supervising first- and second-cycle thesis projects and doctoral students, preferably supported by a finished pedagogical training with regard to teaching in higher education institutions and doctoral supervision.

Since the subject of computer science is male-dominated, we encourage female applicants. Applicants will be selected through a qualitative overall assessment of the documented competences and skills, focusing on the suitability to conduct teaching and research and to contribute to a successful development of the research group and the department. The ability to teach in Swedish is a bonus, but not required.

In the overall assessment of an applicant's skills, particular significance will be attached to the applicant's potential to have a successful career as a teacher and researcher.

Note that a senior lecturer position in Sweden is similar to an assistant professorship in other countries, but the contract will be permanent.

Contacts:
If you fulfill the above-mentioned requirements and are interested in this open position, we strongly encourage you to contact the head of the ISOVIS research group, Professor Dr. Andreas Kerren, via email (andreas.kerren@lnu.se) for providing more information and answering any questions you might have related to this position.

As the official advertisement is not public yet (and not finally approved by the recruitment board of the Faculty of Technology), you cannot apply right now until the online application system will be open. Please do not send your application via email.