Are you looking for a paid PhD in Data Science? You are inquisitive, you like to work independently but also as part of a team? You want to make an important scientific contribution? If so, we are looking forward to meeting you!

As part of the DDAI Comet module (explainable, verifiable and privacy-preserving data-driven AI) we offer a PhD position in the area Social Computing.

**PHD with focus on Privacy in Recommender Systems (f/w)**

**(38.5 h/w) in Graz**

**Tasks:**

Personalized recommender systems are indispensable in today’s online world. Recommendation algorithms support users in finding resources (e.g., documents, movies, music) in large and complex information spaces such as e.g., the Web. The generation of personalized recommendations requires logging of user interactions and collecting personal data about the user. This entails several privacy and security risks; plus, it can raise privacy concerns of users and lead to losing trust in the system.

We are looking for a PhD student, who is interested in research on privacy-preserving recommender systems. In particular, the student will:

- investigate privacy-protection techniques and their applicability to recommender systems
- research on privacy-preservation from the user perspective, i.e., explicit user-controllable privacy levels and their effectiveness in alleviating privacy concerns and technical means to ensure user-controlled data stays with the user locally (e.g., via federated learning)
- design and evaluate new privacy-preserving recommender systems
- publish research findings in top-tier scientific venues and journals

The dissertation work will be carried out in the Social Computing team of Elisabeth Lex and linked to existing research on recommender systems in this group. The dissertation will be supervised at the Doctoral School of Computer Science at Graz University of Technology by Univ.-Prof. Dr. Stefanie Lindstaedt and Ass. Prof. Dr. Elisabeth Lex.

**Required qualifications:**

- Master's degree in Computer Science, Information and Computer Engineering, Mathematics, or similar fields of study
- Good knowledge of recommender systems and machine learning; knowledge in data security and privacy, as well as federated learning is a plus
- Experience and practical proficiency with programming languages and tools (e.g., Python, Java, Git)
- Analytical thinking as well as independent and structured work
- Excellent communication and teamwork skills
- Very good knowledge of English in both spoken and written; German of advantage

**We offer:**

- A dynamic work environment with highly qualified and motivated colleagues
- Comprehensive support for your dissertation project at Graz University of Technology
- Close collaboration with other research groups and industry
- Opportunities for professional and personal development

The minimum salary for this full-time position (38.5 h/w) is € 2,750 gross per month (14 times a year). There is a willingness to overpay depended on experience and qualifications.

Please submit your application with a motivational statement, a detailed CV and a current transcript of records at career@know-center.at.