SWZ Clausthal – Göttingen
Simulationswissenschaftliches Zentrum

Einladung zur Ringvorlesung
„Simulationswissenschaften“

Donnerstag, 14. März 2024, Multimedia Hörsaal (D5), TU Clausthal, 15:00 Uhr

Dr. Leon Kellerhals (TU Berlin)

spricht über das Thema

Social Fairness in Clustering

Inhalt des Vortrags:

Fair (unbiased) decision making is a crucial research area in machine learning and data analysis. To ensure fairness, a plethora of different fairness notions and fair algorithms have been introduced, studied, and implemented. One of the most important tools in the above areas is clustering: Given some data in some form, the goal is to give structure to the data in some form. Since the seminal paper by Chierichetti et al. [NIPS '17], several fairness notions were introduced for several variants of the clustering problem. The goal of this talk is to give a rough overview over the world of fair clustering, and then present work on two specific areas in this realm.
The first area is on correlation clustering, where the task is to partition the vertices of a graph into clusters. We propose a new fairness variant: Suppose each vertex represents an individual which is part of a (say ethnic) group. Then our goal is to ensure that each group of individuals is equally well represented by the clustering.
The second area focuses on individual fairness, where we are not given information on the groups, but want to make sure that each individual is well represented. Over the years, many variants of individual fairness have been introduced for the problem of clustering data points. Using tools from social choice, we introduce a new fairness notion that incorporates all of these variants and further show that two of the variants are inherently the same.
The results on correlation clustering are joint work with Vincent Froese and Rolf Niedermeier, and the results on individual fairness are joint work with Jannik Peters.

Gäste sind herzlich willkommen.

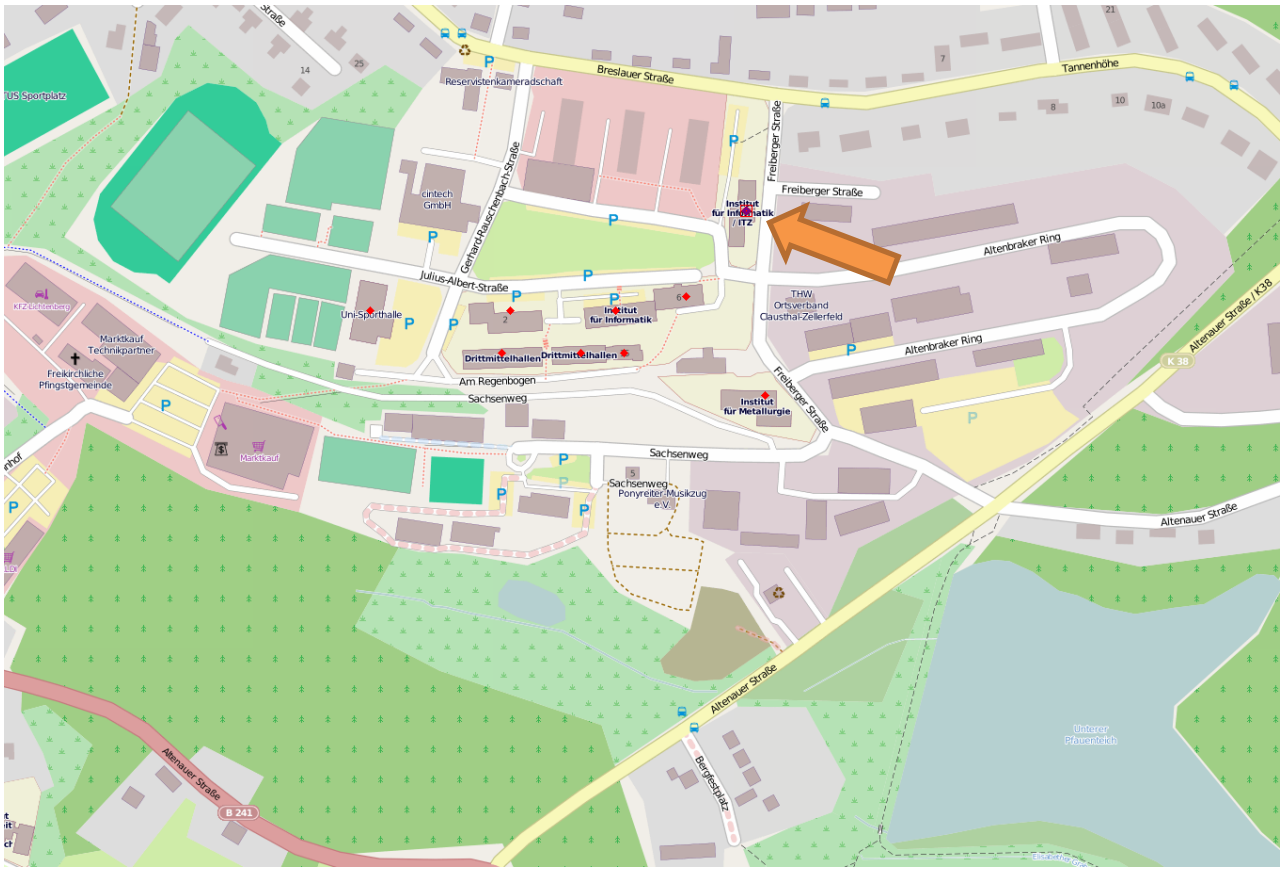
Geschäftsstelle:
Gebäude C9
Arnold-Sommerfeld-Straße 6
38678 Clausthal-Zellerfeld
alexander.herzog@tu-clausthal.de
Telefon: +49 5323 72-2966

Das SWZ ist eine gemeinsame Forschungseinrichtung der Universitäten

TU Clausthal
GEORG-AUGUST-UNIVERSITÄT GÖTTINGEN

Der Vortrag findet in folgendem Gebäude statt:

Multimedia-Hörsaal
Institut für Informatik, Hörsaal Gebäude (D5)
Albrecht-von-Groddeck-Straße 7
38678 Clausthal-Zellerfeld



Navigation:

tu-c.de/d5