

Invitation to the Oral Examination – Department CE

For the occasion of his examination for a Doctoral Degree,

Hao Xing

will present his dissertation entitled

Understanding Human Actions: A Graph Convolutional Framework for Intelligent Systems in Human-Robot Interaction

on **19th of December 2024** at **09:00 h**

Attendance to the presentation is open to the public. The presentation will be in English.

The candidate, all members of the Examination Committee, and authorized examiners of the TUM School of CIT are invited to the presentation and subsequent oral examination.

The presentation and subsequent examination will take place hybrid (Zoom and in person) in room **01.06.020, TUM School of CIT, Boltzmannstr. 3, 85748 Garching**

Zoom

<https://tum-conf.zoom.us/j/2176944321?pwd=bDhURGJDVfHMDhtdC9vMk1HWEZYdz09>

Meeting ID: 217-694-4321

Password: 738086

Examination committee:

Chair: **Prof. Michael Gerndt**

First Examiner: **Prof. Darius Burschka**

Second Examiner: **Prof. Klaus Diepold**

Garching, the **3rd of December 2024**

Mailing list:

Members of the examination committee

Doctoral candidate

Abstract:

Understanding human behavior is crucial for intelligent systems, especially in human-computer interaction. This research delves into abstracting human behavior through graph representations, leveraging attention mechanisms to adapt relationships, and leveraging graph convolutional networks to parse spatial and temporal features. The framework predicts labels, and segments sequences, and aims to bridge the gap between training and real-world scenarios for safer human-computer interaction.