

Invitation to the Oral Examination – Department CS

For the occasion of his examination for a Doctoral Degree,

Mr. Christian Diller

will present his dissertation entitled

3D Human Behavior Generation through Action and Interaction Synthesis

on Tuesday, **10th of December 2024** at 8:00 am (German time)

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 in room 00.12.019 (CIT, Boltzmannstr. 3, 85748 Garching) and online via Zoom:

<https://tum-conf.zoom-x.de/j/68356191361?pwd=PPbfhmbyaQ6UUBNxrnlVqzBD01z3u8.1>

Meeting-ID: 683 5619 1361

Passcode: 142073

Examination committee:

Chair: **Prof. Stefan Leutenegger**

First Examiner: **Prof. Angela Dai**

Second Examiner: **Hon.-Prof. Michael Black, Max-Planck-Institute, Tübingen**

Garching, the 26th of November, 2024

Mailing list:

Members of the examination committee

Doctoral candidate

Abstract:

Learning how to share a common space between autonomous systems and humans requires the capability to understand, generate, and forecast human actions and interactions.

This dissertation introduces:

- 1) Characteristic 3D Poses, semantically meaningful and goal-oriented probabilistic action poses.
- 2) A method to forecast complex sequences of action labels and 3D poses, only requiring 2D observations.
- 3) An approach to generate dynamic human-object interactions from geometry and text.