Invitation to the Oral Examination – Department CS

For the occasion of her examination for a Doctoral Degree,

Nazila Esmaeili

will present her dissertation entitled

Computer-Aided-Diagnosis for Laryngeal Lesion Assessment: A Feature Extraction and Machine Learning Approach Applied on Enhanced Contact Endoscopy Images

on **15th. October, 2024** at **4:30 pm**

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

Online via BBB:

https://bbb.cit.tum.de/rue-bui-mox-wgw

Access code: 043837

Examination committee:

Chair: **Prof. Rüdiger Westermann – CIT, I15**

First Examiner: **Prof. Nassir Navab – CIT, I16**

Second Examiner: **Prof. Michael Friebe – Otto-von-Guericke-Universität Magdeburg**

Third Examiner: **Prof. Felix Nensa, Universitätsklinik Essen**

Garching, the **04th.** of **September 2024**

Abstract:

This dissertation presents the development and validation of different feature extraction and Machine Learning techniques for laryngeal lesion assessment using Contact Endoscopy combined with Narrow Band Imaging images. The effectiveness of all methods is demonstrated in different classification scenarios on the generated data set. The application of these methods in a Computer Aided Diagnosis system can increase objective evaluation of laryngeal lesion and reduce the need for surgical biopsy.