

Invitation to the Oral Examination – Department CE

For the occasion of her examination for a Doctoral Degree,

Sarah Seifi

will present her dissertation entitled

Explainable and Interpretable AI for Sensing Applications

on **29.04.2026** at **01:00 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 in

Room 3999 (0509.04.999), Building 0509, Main Campus

(Arcisstr. 21, 80333 München)

<https://nav.tum.de/room/0509.04.999>.

Examination committee:

Chair: **Prof. Dr. Hussam Amrouch**

First Examiner: **PD Dr. Lorenzo Servadei**

Second Examiner: **Prof. Dr. Fabian Lurz**

Third Examiner: **Prof. Dr. Robert Wille**

Munich, the **17th** of **March 2026**

Mailing list:

Members of the examination committee

Doctoral candidate

Abstract:

AI is shifting from a sole focus on performance to addressing transparency and interpretability, driven by user demands, regulations like the EU AI Act, and real-world needs. This dissertation presents explainable and interpretable AI methods for sensor-based multivariate time-series data, combining black-box, white-box, and hybrid grey-box approaches. Validated on gas and radar data, it provides a framework for accurate, interpretable, and regulation-aligned AI systems.