Explainable AI: Transparency in Artificial Intelligence

As artificial intelligence continues to shape industries and societies, the need for transparency in AI algorithms has never been greater. Explainable AI (XAI) focuses on making AI systems more understandable and interpretable, fostering trust while enhancing their effectiveness.

A major challenge in AI adoption is the “black box” nature of many machine learning models, which can produce highly accurate results without revealing how they arrived at their conclusions. Explainable AI addresses this by providing insights into decision-making processes, making AI-driven decisions more transparent and accountable.

Beyond just trust, XAI has practical applications in analyzing complex data sets across various domains. From climate modeling to industrial process optimization, explainability allows stakeholders to verify results, detect biases, and ensure fairness. In this talk, I will explore the principles and methods of Explainable AI, demonstrating how transparency can drive responsible AI adoption and maximize the potential of intelligent systems.

Bio: Prof. Dr. Mazhar Hameed

Prof. Dr. Mazhar Hameed is a Professor of Software Engineering at Gisma University of Applied Sciences. His research focuses on the efficient processing of large-scale data, with an emphasis on intelligent methods for data preparation and integration - critical foundations for data analytics and AI applications.

Dr. Hameed holds a PhD in Data Science and Engineering from the Hasso Plattner Institute at the University of Potsdam. His contributions to the field are recognized through numerous publications in top-tier conferences and journals, including PVLDB, SIGMOD, EDBT, CIKM, and SIGMOD Record. His PhD research earned the Best Paper Award at the 2024 EDBT conference and the Research Highlights Award at the 2024 SIGMOD conference, marking his influence in the data management community.