Prof. Dr. Mathias Kraus

Chair for Explainable AI

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Mathias Kraus holds the Chair for Explainable AI at the Faculty of Informatics & Data Science, University of Regensburg, Germany. His research is concerned with the development of novel interpretable machine learning models for high-stakes domains, with a special focus on healthcare. His work has been published in prestigious outlets at the intersection of operations research, information systems, and computer science, with award-winning publications at the Conference on Human Factors in Computing Systems (CHI), the Hawaii International Conference on System Sciences (HICSS), and the Global Research Alliance for Sustainable Finance and Investment (GRASFI).

PROFESSIONAL EXPERIENCE

Full Professor for Explainable AI   Feb. 2024 - Present
- University of Regensburg, Germany

Co-Head of Junior Research Group "White-Box AI"   Aug. 2022 - Present
- FAU Erlangen-Nuremberg/University of Regensburg

Assistant Professor for Data Analytics   Jan. 2021 - Jan. 2024
- FAU Erlangen-Nuremberg, Germany

Postdoctoral Researcher   Oct. 2020 - Dec. 2020
- ETH Zurich, Switzerland

EDUCATION

Doctorate Program   Nov. 2017 - Sep. 2020
- ETH Zurich, Switzerland
- Title "Deep Learning in Business Analytics: Methods and Applications"

Master of Science Informatics   Mar. 2014 - Feb. 2017
- Karlsruhe Institute of Technology, Germany

Bachelor of Science Mathematics   Oct. 2010 - Feb. 2014
- Karlsruhe Institute of Technology, Germany

SELECTED PUBLICATIONS

- Mathias Kraus, Daniel Tschernutter, Sven Weinzierl, Patrick Zschech. Interpretable Generalized Additive Neural Networks. In *European Journal of Operational Research (EJOR)*, 317, 303–316, 2024.

- Mathias Kraus, Maytal Saar-Tsechansky, Stefan Feuerriegel. Data-Driven Allocation of Preventive Care: The Case of Diabetes Mellitus Type II. In *Manufacturing & Service Operations Management (MSOM)*, 26(1), 137–153, 2023.

- Robin Deuber, Patrick Langer, Mathias Kraus, Matthias Pfaeffli, Matthias Bantle, Filipe Barata, Elgar Fleisch, Wolfgang Weinmann, Felix Wortmann. Moving Beyond the Simulator: Interaction-Based Drunk Driving Detection in a Real Vehicle Using Driver Monitoring Cameras and Real-Time Vehicle Data. In *Conference on Human Factors in Computing Systems (CHI)*, 2025.