

Know-Center | Know-Center GmbH – Research Center for Data-Driven Business & Big Data Analytics

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# UNDERSTAND, ANALYZE, AND OPTIMIZE AI

BETTER ALGORITHMS AND FASTER INNOVATION - XAIVIER ALLOWS TO AVOID ERRORS IN DEEP-LEARNING MODELS, THE OPTIMAL USE OF DIFFERENT MODELS, AND BETTER RESULTS.

A tool developed at the Know Center now interactively helps users deeply understand the conclusions of deep-learning models while optimizing and accelerating explanations.

# XAIVIER

Deep-learning models have enabled great advances in the fields of autonomous driving, patient diagnostics, language translation, and many more - but they are incredibly complex. Due to this complexity, humans often fail to understand why an algorithm arrives at certain decisions and what background influences the AI findings. Deficiencies or errors in the evaluation can thus not be identified immediately, which can have serious consequences. To address this, the Know Center developed XAIVIER.

## Simply in the browser

XAIVIER, a web application for interactive explainable AI focused on time series, helps users explore and properly select an appropriate explanation method for their dataset and model. Proper selection of an appropriate method is very important

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## SUCCESS STORY



because it is the only way to effectively detect potential errors in the model.

## **Recommendations for users**

XAIVIER is unique in that it provides an explanation and recommendation service in the process. The application provides information on why an explanation method is appropriate for the task at hand, or even why it should be avoided. The application can therefore assist the user in many ways, such as recognizing whether a model has learned incorrectly, verifying whether the model makes predictions based on the correct data characteristics, and much more.

The demo of XAIVIER is now publicly available and awaits first applications by curious users: https://xai-explorer-demo.know-center.at

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### **Project coordination**

Dr. Andreas Trügler, Know-Center T +43 (0) 316 – 87330895 atruegler@know-center.at

#### Know-Center GmbH

Sandgasse 26 8010 Graz T +43 (0) 316 – 87330895 office@know-center.at www.know-center.at

Federal Ministry Republic of Austria Climate Action, Environment, Energy, Mobility, Innovation and Technology Federal Ministry Republic of Austria Digital and Economic Affairs Austrian Research Promotion Agency Sensengasse 1, A-1090 Vienna P +43 (0) 5 77 55 - 0 office@ffg.at www.ffg.at