

Fin-tech HO2020 RESEARCH SEMINARS

1st July 2020 @10.00-11:00
ONLINE

Explainability of a Machine Learning Granting Scoring Model in Peer-to-Peer Lending

Peer-to-peer (P2P) lending demands effective and explainable credit risk models. Typical machine learning algorithms offer high prediction performance, but most of them lack explanatory power. However, this deficiency can be solved with the help of the explainability tools proposed in the last few years, such as the SHAP values.

In this work, we assess the well-known logistic regression model and several machine learning algorithms for granting scoring in P2P lending. The comparison reveals that the machine learning alternative is superior in terms of not only classification performance but also explainability. More precisely, the SHAP values reveal that machine learning algorithms can reflect dispersion, nonlinearity and structural breaks in the relationships between each feature and the target variable.

Zürcher Hochschule
für Angewandte Wissenschaften



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Javier Arroyo received the PhD degree in computer science from Universidad Pontificia Comillas, in 2008. Since 2013, he has been an Associate Professor with the Department of Software Engineering and Artificial Intelligence, Universidad Complutense de Madrid (UCM), and a Researcher with the Instituto de Tecnología del Conocimiento. His research interests include time series forecasting and machine learning applied to different domains and real-life problems. He is currently the PI of a national research project on Decentralized Autonomous Organizations in the blockchain and of the H2020 Fin-Tech project at UCM.

How to join the meeting:

ZOOM link:

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MEETING ID: 990 3055 2606