

# Fintech and Artificial Intelligence in Finance Towards a transparent financial industry

COST Action 19130

MC Meeting

CZECHIA update



# Czech Management Committee

Oleg Deev      Dagmar Vágnerová Linnertová (Masaryk University)



Silvie Káfková – Masaryk University

Martin Řehák – Resistant AI

Tomáš Plíhal – Masaryk University

Petr Hájek – University of Pardubice

Ladislav Křišťoufek – Charles University

Karel Kozmík – Charles University

## Publications (with acknowledgement)

Yang, F., Abedin, M. Z., & Hajek, P. (2024). An explainable federated learning and blockchain based secure credit modeling method. *European Journal of Operational Research*, 317(2). 449-467.

Yang, C., Abedin, M. Z., Zhang, H., Weng, F., & Hajek, P. (2023). An interpretable system for predicting the impact of COVID-19 government interventions on stock market sectors. *Annals of Operations Research*.

Bouteska, A., Hajek, P., Fisher, B., & Abedin, M. Z. (2023). Nonlinearity in forecasting energy commodity prices: Evidence from a focused time-delayed neural network. *Research in International Business and Finance*, 64, 101863.

Hampl, F. and Vágnerová Linnertová, D. and Horváth, M. (2024) Crypto Havens During War Times? Evidence from the Russian Invasion of Ukraine. *The North American Journal of Economics and Finance*, 71, 102093.

Agakishiev, I. and Härdle, W.K. and Kozmik, K. and Kopa, M. and Petukhina, A., Multivariate Probabilistic Forecasting of Electricity Prices With Trading Applications. Available at SSRN: <https://ssrn.com/abstract=4527675>

## STSM

Tomáš Plíhal (Masaryk University) – Bern University of Applied Sciences – autumn 2022

Karel Kozmík (Charles University) – Humboldt University, Berlin – autumn 2022

## Organized Events

Statistics of Machine Learning – September 30, 2024 (in cooperation with Germany)

Statistics of Machine Learning – October 5-6, 2023 (in cooperation with Germany)

FinAI COST workshop in Brno – October 21-22, 2022 (in cooperation with Poland and Slovakia)

Statistics of Machine Learning – October 6-7, 2022 (in cooperation with Germany)

Statistics of Machine Learning – October 7-8, 2021 (in cooperation with Germany)

## Funded Projects

**Network-based credit risk models on P2P lending markets** (in cooperation with Switzerland) – founded by the Czech Science Foundation and Swiss National Science Foundation – 2022-2025

**Analytical Platform 2.0.** – automated portfolio management with AI (in cooperation with CCF Research, s.r.o.) – funded by the Czech Ministry of Industry and Trade – 2023-2025

**Finance education for AI revolution and ESG responsibility** (educational project) – funded by the Czech Ministry of Industry and Trade – 2023-2024