



DATARACING

Policy

As a result of the cooperation between the Magyar Nemzeti Bank (MNB) and the Budapest University of Technology and Economics (BME) (MNB and BME together referred to as the ‘Organiser of the Competition’), Hungarian professionals and enthusiasts will have the opportunity to get closer to the challenges of artificial intelligence and machine learning in the financial sector in a unique competition. The aim of the competition (‘Dataracing’) is for the participants to showcase their skills in data science, while creating high quality solutions that are of value for others. Prizes will be awarded to the participants who create the best solutions.

Section 1

Who is eligible to apply for Dataracing

Any Hungarian citizen over the age of eighteen on 1 October 2023 and any private individual over the age of eighteen on 1 October 2023 who has a Hungarian tax identification number, social security number and registered address in Hungary (hereinafter referred to as ‘Participant’) may apply for Dataracing.

Section 2

Detailed description of the task

- (1) Dataracing will take place on the anonymised and distorted lending dataset provided by the MNB.
- (2) Dataracing is a so-called ladder race, where the Participants solve a supervised machine learning task on a predefined data set, in which they submit a single estimate for predefined entities to the competition. The results of the test dataset are sent to the Dataracing site, dataracing.hu, where they are evaluated by the system on the basis of the so-called log loss on the dataset.
- (3) The best solution is considered to be the one that most accurately estimates the probability that the individual counterparties will have a defaulted loan in the two years following the period of the data set. The exact metric is what is called the log loss value, which is the lower the value it takes the better.

Section 3

Conditions of Dataracing

- (1) Participants can enter the Dataracing competition individually via the dataracing.hu website.
- (2) A Participant may submit more than one solution.
- (3) By participating in the Dataracing, the Participants agree that if they are awarded a prize, they will undertake the following:
 - a. The work is the Participant’s own exclusive intellectual creation and no third party has any rights in it that prevent the licensee from obtaining rights.
 - b. If the Participant is awarded the prize, they will contribute to a web publication in Hungarian or English by 31 January 2024, describing in detail the ideas, the thought process and the main parameters of their solution, and they will agree to the publication of this article on dataracing.hu. The Participant is not obliged to publish the source code. If the winner is not skilled in the preparation of publications, the Dataracing Committee will provide technical support for the preparation of the paper.

- c. By submitting a solution, the Participant commits to enter into a licensing agreement for the awarded solution.
- d. The Participant agrees that if they are awarded a prize, their name will be publicly displayed among the Dataracing prize winners on dataracing.hu.
- e. If the Participant have a chance of winning the special prize, they must prove that they are a full-time student at a Hungarian higher education institution.
- f. If the Participant is also competing for the special prize offered to students and has the necessary student status, they can indicate their intention to participate by adding the postfix ‘_uni’ / ‘_UNI’ or ‘_Uni’ to the end of their publicly indicated name on the leaderboard on eval.dataracing.hu.

Section 4

The prizes awarded in the Dataracing competition

- (1) Prizes will be awarded to the participants who submit the best solutions, as decided by the Committee. The super-gross prize money for the competition is HUF 6,000,000, of which the winners will receive the following proportions:
 - 1st place winner 41.8%
 - 2nd place winner 25%
 - 3rd place winner 16.6%
 - Special prize: The best solution submitted by a student: 16.6%
- (2) The Organiser of the Competition reserves the right not to award any prize with respect to the quality, reproducibility and professional ethics aspects of the solutions.
- (3) The prizes will be paid no later than 30 March 2024.

Section 5

Deadline for submitting the solution

- (1) Deadline for submitting the solutions: 3 December 2023 2:00 p.m. on dataracing.hu

Section 6

Grounds for disqualification

- (1) A Participant who fails to comply with any of the conditions set out in the application, in particular SECTIONS 1 and 3, will be disqualified;
- (2) Any person who is in an employment relationship with the MNB or who is involved in the preparation or implementation of the Dataracing may not participate even if they otherwise fulfil the conditions set out in SECTIONS 1 and 3;
- (3) Participants will be disqualified if, in solving the data analysis task, they have created their solution using external data sources, unless they use macroeconomic data from the Hungarian Central Statistical Office in aggregations no deeper than county level.

SECTION 7

Evaluation of solutions, deadline for evaluation, main criteria, method of notification of the result

- (1) The solutions will be reviewed by a three-member Committee, two members from the BME and one from the MNB.
- (2) The Committee will decide as set out below:

- a) it will determine the ranking that can be established among the Participants on one specific half of the dataset of the Dataracing evaluator (test). The order in the Dataracing ranking is indicative, because the evaluation dataset contains different data series than the Dataracing test dataset.
 - b) the Participants submitting the top three solutions will be invited to submit the code or program of the solution that generated their result for review. The invited Participants will share this with the Committee by email by 6 December 2023.
 - c) the Committee will check within 3 working days that the solution is actually working with the allowed tools and the right data sets.
 - d) after the verification, the Committee will decide whether the invited Participants can be included in the list of the winners. If an invited Participant is disqualified, the next competitor in the ladder competition will be invited to be among the prize winners, and the Committee will carry out the verification procedure under c) on the solution submitted by this competitor as well.
 - e) in the end, the final result of the Dataracing is announced and the first three place winners are selected.
 - f) similar methods are used to determine which solution receives the special prize for students. The solutions of the Participants who have indicated in their name that they are also competing for this special prize will be taken into account for the determination of the special prize. In addition to the verification of the solution, the Participant will be asked to provide proof of their student status.
- (3) Participants will be notified of the results of the Dataracing by email by 12 December 2023. The results are also published on dataracing.hu.
- (4) There is no opportunity to correct deficiencies in the application.

SECTION 8

Data protection

The Committee will process the data necessary for the assessment in accordance with the data protection and other legislation in force, as set out in the attached Data Protection Notice.