# **ARCathon Competition**

# **Terms & Conditions of Participation**

V-2023-10-19-Org

#### 1. ARCathon and Participation

- 1.1 The international ARCathon competition honors outstanding individuals, freely composed teams, companies and institutions (companies or institutions or other types of legal entities referred to as "Organizations"). It distinguishes the most creative and transdisciplinary participants, making hidden champions and expertise in artificial intelligence, further referred to as "AI", visible. The ARCathon competition challenges participants with fundamental questions: How can a new generation of algorithms keep up with human-level intelligence? What does it take to achieve human-level reasoning and abstraction?
- 1.2 Applications for the award are possible only upon completing the dedicated registration process via the public website: <a href="https://lab42.global/registration">https://lab42.global/registration</a>. Applications must be made under a team name, irrespective of the participation as an individual, freely composed team or **Organization** and requires the acceptance of these **Terms and Conditions of Participation** and the **Competition Guide**. The **Competition Guide**, available online at <a href="https://lab42.global/arcathon/guide">https://lab42.global/arcathon/guide</a>, is an integral part of these **Terms and Conditions of Participation**.
- 1.3 In the case of registration as a team representing an Organization, at least half of the team members must be employed or contracted by indicated Organization at least with a 50% employment (further referred to as "50% requirement") or be a member or a student of the represented Organization (students at colleges, gymnasiums and universities are explicitly included).
- 1.4 The Organizer reserves the right to conduct active matchmaking to suggest individual applicants to registered teams. Interested individuals are requested to contact: arcathon@lab42.global.
- 1.5 Participation in the competition or its events is free of charge.

#### 2. Patronage and Jury

- 2.1 The ARCathon competition is organized by the Mindfire Foundation, c/o Sielva Management AG, Gubelstrasse 11, 6300 Zug, Switzerland (CHE-142.155.301), and the Mindfire AG (CHE-372.850.654), c/o accounting and tax point ag, Oberdorfstrasse 2, 8808 Pfäffikon, Switzerland, combinedly further referred to as "Mindfire" or "the Organizer", represented by its Lab42 division with address at Obere Strasse 22B, 7270 Davos Platz, Switzerland, (further referred to as "Mindfire" or "the Organizer") or an assigned representative.
- 2.2 The five jury members, nominated representatives, proven AI experts with sound scientific and research backgrounds, as well as experienced jury members of existing AI or digital economy awards and external ad hoc partners, and the host of ARCathon are:
  - François Chollet
    - Host and jury member, independent
  - Pascal Kaufmann
    - Host, representing the Mindfire Foundation
  - Prof. Dr. Benjamin Grewe
    - Jury member, representing the Institute of Neuroinformatics (INI) at ETH Zurich
  - Prof. Dr. Thilo Stadelmann
    - Jury member, representing the AI Centre of the ZHAW School of Engineering
  - Brigitte Sommer, Lawyer, jury member, independent

The jury is chaired and coordinated by the president of the Mindfire Foundation.  $\label{eq:main_condition}$ 

2.3 Project office is operated by Mind fire's Lab42 division via arcathon@lab42.global, Obere Strasse 22B, 7270 Davos Platz, Switzerland

## 3. Conduct of Competition and Submissions

- 3.1 All material and information submitted must (a) describe original or (b) properly referenced work and (c) not contain intentionally fabricated or intentionally misleading information. The references and the corresponding recognition must be explicitly stated if existing solutions are to be integrated.
- 3.2 The Terms and Conditions of Participation must be signed off in case of any substantial change (beyond grammar or stylistic editions) by means of a majority decision that needs to be taken in writing (e-mail is sufficient). Participants will be notified by e-mail in case of substantial amendments.
- 3.3 Submission and selection process: The selection process is structured along 3 phases and coordinated by the Organizer.
  - (1) Phase-1 ("Application stage"): Teams are encouraged to register during the time period indicated on the ARCathon website at <a href="https://lab42.global/arcathon">https://lab42.global/arcathon</a>. In case of doubt, Lab42 will approach applying teams and ask for the latest documentation, such as evidence on employment status, domicile, and further details. Otherwise, teams are confirmed and cleared for submitting algorithms.
  - (2) Phase-2 ("Submission Phase"): Teams shall submit their algorithms during the period indicated on the ARCathon website, at the latest as of 1

    December 2023 at midnight CET. The ranking of submitted algorithms will be based on the material provided, as well as additional research and conformance testing that is organized by Mindfire. Submissions may be rejected if not in accordance with these Terms and Conditions of Participation and Competition Guide. All participants that have submitted algorithms, are sorted in a ranked list showing the percentage of correctly solved tasks of the undisclosed "private test set". The ranking is based on a binary decision of whether the submitted algorithm correctly

generated the output. Up to 3 versions of algorithms (executable programs) can be submitted every calendar week upon the start of the submission phase, and the best ranking will be published on the leaderboard with the respective team's name. No personal data will be disclosed without the explicit prior consent of the team leader. Feedback on performance on the private test set is usually returned to the team leader within less than 72 hours of submission. All communication will be through the registered team leader. Rankings will be listed on the public leaderboard, which can be accessed at <a href="https://lab42.global/arcathon/leaderboard/">https://lab42.global/arcathon/leaderboard/</a>.

- (3) Phase-3 ("Winner selection stage"): Final rankings are made and published as indicated on the ARCathon website. The 3 best ranking teams will be informed and invited to the ARCathon award ceremony taking place within 30 days after the winner announcement (remote participation is possible). The decision on the winner is taken based on the rankings (percentage of correctly solved ARC tasks). In case of dissent or equal ranking, a deliberation and resolution call can be taken until the top-3 teams are selected and the winner is nominated by a majority vote of the jury.
- 3.4. Novelty and uniqueness: Algorithms based on ideas that have already been implemented in identical or similar fashion, or that do not differ from an already implemented idea in any significant aspect may be excluded from consideration by the **Organizer** based on a first-to-file basis. In the case of equivalent performance, the first team reaching the respective core ranks higher.

#### 4. Prizes and selection process

- 4.1 Rankings are calculated by means of measurement of the solution rates on the private (undisclosed) test set accessible to the jury and the Organizer. Two milestones are defined: i.) "Milestone-32", quantifying a solution rate of at least 32.0%, and ii.) "Milestone-42", quantifying a solution rate of at least 42.0%.
  - (1) During ARCathon 2023, the first team to achieve a solution rate above 31% on the private test set will win CHF 1'000 for each percentage point above 31% (e.g., the first team with a solution rate of 33% would win CHF 2'000). Subsequent teams or the same team with a higher solution rate than the new record win CHF 1'000 multiplied by the difference between their solution rate and the latest highest solution rate (e.g., a team with a solution rate of 36% would now win CHF 3'000, calculated as CHF 1'000 x (36-33)). The maximum prize money available amounts to CHF 69'000.
  - (2) The first team that exceeds the Milestone-42 is honored at the Global Swiss Al Awards 2023.
  - (3) The best 3 ranked teams that achieve or exceed the Milestone-42 are invited to a 2-day team event in Davos, with all expenses paid for accommodation for one night, ski/mountain pass, fun activities, and meals, at a date suitable to the respective team. The price is restricted to five people per team. Travel costs are not covered.
  - (4) The team members' names of the three first teams that hit the **Milestone-42** are engraved in stone on a dedicated spot within or above the city of Davos, Switzerland. Rejection of such engraving due to anonymity is possible.
  - (5) Finally, the first-ranked team will receive a dedicated ARCathon trophy and media coverage in a tier-1 newspaper in Switzerland. The second and third-placed teams will receive a certificate attesting to their top placement and providing a rationale for that placement.
  - (6) Should two teams achieve the same solution rate ranked as under the 3 best, the jury decides.
- 4.2 **ARC Novelty Prize**: Teams that meet the eligibility criteria can win a workshop in Davos, Switzerland. Mindfire will cover the winners' travel costs (up to a maximum of 1,000 USD per person, limited to economy flights and second class of public transport) and provide the winners with accommodation for the duration of the workshop. Winners must handle their own travel arrangements, including obtaining any necessary visas, and must secure approval from Mindfire for the costs of their bookings before making reservations. To be eligible for the ARC Novelty Prize, teams must:
  - (1) Be registered for ARCathon 2023,
  - (2) Achieve at least a 1% solution rate on the official ARCathon 2023 leaderboard,
  - (3) Submit an outline of their strategy and the corresponding code for jury review, and
  - (4) Satisfy the jury's minimum judging criteria.
- 4.3 Any decisions of the jury are final and binding, without appeal, with respect to all aspects of the ARCathon. No correspondence is conducted, neither with regard to a disqualification nor the selection.
- 4.4 At least one representative of the team must make herself or himself available to receive the award. Failure to be available will be considered a withdrawal of the application unless special circumstances occur.
- 4.5 Participants in the competition are not entitled to compensation for expenses of any kind.
- 4.6 Should the prize be prohibited by applicable laws, it is void. If the prize is subject to applicable taxes, the winner(s) are liable for such taxes.

### 5. Communication

5.1 The ARCathon competition will be followed by the media. Photos, videos, and contributions to events and the award ceremony will be published in the media and in various channels, such as on the Lab42.global and Mindfire.global websites, newsletters, and social media. Participants agree to such publications. The winners of the competition are entitled to mention their successful participation in the ARCathon competition in their own communications in the future.

### 6. Data Protection

- 6.1 Participants grant the **Organizer** the right to process their submitted personal data for the purpose of the ARCathon competition, and to share their personal data with its staff, representatives, members of the organizing office, mentors, jury members, experts at events and other persons involved in the competition on a need-to-know basis. The **Organizer** undertakes to obtain confidentiality undertakings from these recipients.
- 6.2 No personal data of participants will be published or disclosed without the consent of the participants, except for the indicated team's names (which may be an alias).
- 6.3 The team members of the winners selected and confirmed by the ARCathon jury (the best 3 finalists) grant the **Organizer** the right to record and publish a video about the team and its project.

#### 7. Ownership in IP, License and Right to Publish

- 7.1 Each ARCathon competition participant shall retain and have full ownership of their know-how and IP and any other IP rights ("IP"), in each case, whether registered or unregistered, including the right to apply for intellectual property rights and the entitlement as such, namely inventions.
- 7.2 Upon registration for the ARCathon competition, each participant grants to the **Organizer** an unlimited, non-exclusive, sub-licensable, transferable, perpetual, irrevocable, royalty-free and fully paid-up license to publish and further develop any submission and creation.
- 7.3 **Mindfire** maintains the right to publish and share any results at any given time and in accordance with the Mindfire's purpose and regulations. **Mindfire** treats all results with the utmost care and respect and seeks whenever and however possible the consent of the respective IP owner before any publication.

#### 8. Cancellation and Limitation of Liability

- 8.1 The Organizer reserves the right to cancel or suspend the ARCathon competition for any reason at any time.
- 8.2 The Organizer reserves the right to exclude any participant who, in its opinion disturbs the ARCathon competition or violates these Terms and Conditions of Participation and the Competition Guide.
- 8.3. The liability of the **Organizer** and the jury members shall be excluded within the limits of the law, including the liability for a temporary or final abort of the ARCathon competition.
- 8.4. The **Organizer** and the jury members shall in no event be liable for any expenses incurred in connection with the application and participation in the ARCathon competition, as well as the attendance at the award. Further, any liability for damages caused by employees or other auxiliary persons is excluded.

#### 9. Applicable Law and Final Decision

- 9.1 The ARCathon competition is subject to substantive Swiss law.
- 9.2 Any recourse to courts of law is excluded.