CAPITAL YOUTH EXPO · COMPETITION RULEBOOK

No. 06 • TECHNOLOGY • UPDATED EDITION

AI Challenge (Applied AI/ML Challenge)

Teams are given a real-world dataset and problem statement (e.g., prediction, classification, or generative task) and must design, train, and present a machine-learning solution that is evaluated on accuracy, creativity, and clarity of insight.

Rules & Specifications

Team Composition	Each team must consist of 2–4 members.
Format & Duration	The competition will run for **2 hours (120 minutes)**. Teams will receive the problem statement and dataset at the beginning of the competition. Participants must develop their machine-learning solutions, evaluate their results, and submit all required materials within the specified competition timeline. Late submissions will not be accepted.
Competition Schedule	Briefing and challenge release: 10 minutes; Model development and experimentation: 95 minutes; Final submission: 15 minutes. Total competition duration: 120 minutes. Technical judging, verification, and announcement of final results will take place separately and are not included in the 120-minute competition period.
Dataset	A curated, competition-ready dataset will be provided by the organizers. The dataset will be appropriately sized to allow teams to understand, preprocess, and develop their solutions within the 2-hour competition window. Only the officially supplied dataset may be used for task-specific training. External labeled datasets, publicly available answers, or test labels must not be used.
Programming Tools & Frameworks	Teams may use any programming language and machine-learning or deep-learning framework, including Python, scikit-learn, TensorFlow, and PyTorch.
AI-Assisted Development	AI tools such as ChatGPT, Claude, and similar assistants may be used through their user interfaces for coding assistance, debugging, explanations, and dataset understanding. Teams remain responsible for the correctness of their submissions and must be able to explain all submitted code and methods. AI assistance must be disclosed in the technical report.

LLM API Restriction	Using an LLM API key or accessing an LLM programmatically is prohibited, whether through direct API calls, SDKs, third-party services, or integrations. This restriction applies throughout development, training, evaluation, and prediction generation.
Data Handling	Dataset understanding through AI assistants is limited to discussing the problem statement, data schema, and organizer-authorized examples. Uploading the full competition dataset, test data, or confidential information to external AI services is prohibited unless explicitly authorized by the organizers.
Compute Resources	Teams may use Kaggle GPUs, Google Colab GPUs, or dedicated local GPUs for model training and evaluation. Teams must ensure that their programming environments, required libraries, and development tools are ready before the competition begins. Teams are responsible for saving their work within the competition window. The organizers do not guarantee the availability of third-party cloud resources.
Pretrained Models	Pretrained models are permitted only when explicitly authorized for the announced task. Any permitted pretrained model must be identified in the technical report, including its name, source, and purpose.
Original Work	All team-specific code development, model training, experiments, and submission preparation must take place within the competition window. Standard libraries, organizer-provided starter materials, authorized pretrained models, and disclosed AI assistance are permitted. Copying another team's work or using an undisclosed pre-existing solution is prohibited.

Submission Requirements

Each team must submit the following through the official submission platform before the announced deadline:

- Source code or a notebook containing a reproducible training and inference pipeline.
- A short technical report explaining the approach, preprocessing, feature engineering where applicable, validation strategy, experiments, and results.
- Disclosure of AI assistance, authorized pretrained models, and compute resources used.
- Final predictions in the required format.

Evaluation Criteria

Component	Weight
Leaderboard performance metric — accuracy, F1, or RMSE, as defined for the track	**70%**
Interpretability and originality of approach	**30%**

The applicable leaderboard metric, submission format, and any track-specific evaluation requirements will be announced with the problem statement. The judging panel will assess the 30% component based on the team's technical approach, interpretability, originality, and understanding of its submitted solution. Technical judging and verification will be conducted separately after the 2-hour competition period.

Penalties & Disqualification

The following may result in disqualification:

- Using an LLM API key or accessing an LLM programmatically.
- Using unauthorized external training data, test labels, or publicly available answers.
- Leaderboard probing or attempts to infer hidden test labels through manipulated submissions.
- Creating multiple accounts or duplicate team identities to bypass submission limits.
- Copying another team's work or misrepresenting the origin of submitted materials.
- Failing to disclose AI assistance or authorized pretrained-model use.
- Uploading restricted competition data to external services without permission.

General Rules — Applicable to This Category

— Strict Punctuality — Teams must report to their arena, lab, stage, or table 15 minutes before their scheduled heat or session. Late arrival results in automatic forfeit.

— Fair Play & Sportsmanship — Abusive behavior, argument with referees/judges, or unsportsmanlike conduct leads to immediate disqualification.

— Original Work — All code, models, designs, and submissions must be the teams' own original work produced within the stated contest window. Plagiarism or use of undisclosed pre-existing material leads to disqualification.

— Network & Infrastructure Integrity — Attacking, disrupting, or attempting unauthorized access to event Wi-Fi, judging platforms, gaming servers, or another team's systems/devices is strictly prohibited and may result in disqualification and legal action.

— Judge's Decision — The decision of the technical panel, head referees, and judges is indisputable and final.

These rules are issued by the Capital Youth Expo organizing committee and apply alongside the event's general rules and master rulebook. The committee reserves the right to modify rules, time limits, or format if necessary. Judges' decisions are final and non-contestable.