

NLC2CMD Competition @ NeurIPS 2020

Terms & Conditions

Updated: July 16, 2020

1 Objective

This document shall describe the terms and conditions for the NLC2CMD Competition @ NeurIPS 2020, hereinafter also referred to as NLC2CMD Competition, *competition*, or *event*; and as the *committee* where referring to the organizing committee for the competition.

Person or persons signing this document shall be considered to have expressly agreed to these terms and conditions, for themselves and for all persons that are part of their team constituted for entry into the NLC2CMD Competition – they shall also be herein referred to as *participant*, *entrant*, *team* (in the plural), or *competitor*. See Section 18 for more details.

2 Eligibility & Entry Requirements

Eligibility to the competition shall be determined by the competition organizers, and added or updated to this section of the terms and conditions as necessary. The following rules shall apply.

All participants shall be 18 years or older of age at the time of entering the competition and signing these terms (or having them signed on their behalf); or shall have accordingly reached the age of majority in the relevant jurisdiction.

All government owned entities (GOE's) and any attached persons shall be excluded from eligibility to participate in the competition.

All participants shall provide their names and email addresses as a condition of participation.

None of the organizers (as listed) of the NLC2CMD Competition @ NeurIPS 2020 shall be allowed to participate as entrants in the competition in any form or manner.

3 Limitation of Liability & Releases

IBM and the NLC2CMD Competition @ NeurIPS 2020 committee disclaims any warranties that may accompany participants' entry into the competition; or that shall knowingly or unknowingly accrue via these terms or via entry into the competition.

Acceptance of these terms and conditions shall limit any and all liability to IBM and the NLC2CMD Competition @ NeurIPS 2020 committee.

By accepting these terms and conditions, entrants to the competition, and competition winners, release IBM from any liability that may occur in connection with the NLC2CMD Competition, also known as *the promotion*.

Void where prohibited by law.

4 Right to Cancel

The NLC2CMD Competition @ NeurIPS 2020 committee shall possess the sole right to cancel or otherwise change or suspend the competition, at their sole discretion, at any time.

Any changes of such nature shall be communicated in as reasonably expedient a time possible by the committee to participants, via the competition website (see Section 5) and an update to these terms; and any other means possible or necessary.

5 NLC2CMD Competition Website

Unless otherwise explicitly specified, all information pertaining to the NLC2CMD Competition @ NeurIPS 2020, including these terms and conditions, shall be posted on the competition website, hereinafter also referred to as (competition) website or (competition) site or (competition) page.

This website shall be resident at the following URL: ibm.biz/nlc2cmd, and all resolving addresses and IP addresses therein.

It shall be the sole responsibility of competition participants to regularly check this website for all announcements, notices, regulations, and other information pertaining to the competition.

The NLC2CMD Competition organizers shall make all reasonable and expedient efforts to keep this website up-to-date.

6 NLC2CMD Competition Stages

The NLC2CMD Competition @ NeurIPS 2020 revolves around translating English descriptions of command line tasks to their corresponding Bash syntax. The competition shall unfold over the following 3 stages.

In the first stage participants will be able to access the open data, including documentation in the form of man pages as well as curated posts from Stack Overflow.

The next two stages will allow the participants to test out their models against the held out test and validation data.

All changes to the stages as well as the schedule shall be posted by the NLC2CMD Competition organizers in an as reasonably expedient as possible way on the NLC2CMD Competition website.

6.1 Stage 1

Stage 1 shall feature the release of competition website with rules, training data, man page parser.

At this stage, participants will be able to get started with the open data, man pages repository, and the baseline algorithm.

6.2 Stage 2

Stage 2 shall feature the release of online evaluator over held-out validation data.

The online evaluator (along with leaderboards) shall be hosted on a standard evaluation platform for competitions – EvalAI¹ [[link](https://evalai.cloudcv.org/)].

This will be a black-box evaluation: that data will follow the format of the training data but *the participants will not have access to the labeled data*.

¹<https://evalai.cloudcv.org/>

6.3 Stage 3

The test data shall be drawn from the same distribution as the validation data, the only difference being that participants can only evaluate their model against a the test data for a limited number of times.

The winners of the competition shall be determined from the results on the test data. See Section 8 for more details.

7 Competition Tracks

The competition shall feature 2 tracks, which shall differ in their evaluation metric.

Evaluation Metric: For the purposes of this document and the NLC2CMD Competition, “evaluation metric” shall be taken to be a computable score that shall be used to evaluate the predictions from each participant’s entry on a given test set.

7.1 Track 1: Accuracy Track

This track shall rank participants according to the accuracy of prediction.

The winner of Track 1 shall be the team that has the highest accuracy.

The metric for this track shall be the accuracy of prediction measured by a weighted sum of whether the right utility was recognized; whether the right flags were recognized; and whether the entire syntax was correct (with partial points for partial correctness); weighted by the confidence of prediction.

7.2 Track 2: Efficiency Track

This track shall rank participants according to the energy efficiency of their submitted system.

The winner of Track 2 shall be the team (among the top-5 teams in Track 1) with the lowest energy consumption (in kWh). The energy consumed will be averaged over all the examples in the test set and will measure the energy requirement and the environmental impact of the submission for each inference.

The metric for this track shall be the amount of energy (kWh) used by the submitted system.

7.3 Implementation of Metrics

All metrics shall be implemented by the NLC2CMD Competition committee, and all determinations made by such implementations shall be final. The metrics shall be made available on the competition website.

8 Determination of Winners

Winners for each track shall be determined by the metric for that track.

For the purposes of the NLC2CMD Competition, “winner(s)” shall be construed only as teams, and not individual participants.

There shall be 1 winner per track; there shall be 2 tracks as outlined in Section 7.

For each track, all entries shall be ranked in descending order of the corresponding metric on the test data. The entry on top at the conclusion of the competition shall be declared the winner.

8.1 Ties

Ties at the top of the leaderboard shall be treated as joint winners; the (single) prize shall be shared amongst all joint winners.

8.2 No Winners

In the case that there be no entry at the top of the leaderboard for any track, that track shall be declared to have no winner.

In the case that all submissions in a track fail to outperform the provided baseline, that track shall be declared to have no winner.

9 Rules Governing Multiple Entries

Participants are required to adhere to all rules governing teams, outlined in Section 10.

For each entry into the competition, there shall be different submission limits for different stages, as outlined below:

9.1 Stage 2 Submission Limits

Stage 2 allows participants to submit and evaluate their submission for: a) maximum 5 submissions a day, b) maximum 50 submissions a month, and c) maximum 100 total submissions over the entire stage phase.

9.2 Stage 3 Submission Limits

Stage 3 allows participants to submit and evaluate their submission for: a) maximum 1 submission a day, b) maximum 5 submissions a month, and c) maximum 5 total submissions over the entire stage phase.

10 Rules Governing Teams

The following shall be rules governing all teams constituted for the NLC2CMD Competition; additional rules may apply as decided and notified – via an update to these terms and conditions, via the website, and via intimation to the participants and/or teams – by the NLC2CMD Competition organizing committee.

10.1 Team Size Limits

Teams shall be limited to a maximum of 5 (five) participants per team.

10.2 Team Overlaps

There shall be no team overlaps; that is, no individual participant shall be permitted to be part of more than 1 team and enter the competition.

10.3 Team Mergers

Mergers between teams shall be prohibited.

10.4 Coordination Between Teams

Coordination between teams, including but not limited to sharing of code, information, strategies, datasets, and other items and artefacts pertinent to the competition – as judged by the NLC2CMD Competition committee – is strictly prohibited without pre-approval.

Any desired coordination shall be pre-cleared and approved in writing with the NLC2CMD Competition committee.

Any approved coordination shall come with the condition that the item, artefact, or mode of coordination (e.g. data) between the coordinating teams shall be made available to all other teams if thus directed by the NLC2CMD Competition committee.

10.5 Disqualification of Teams

Teams shall be liable for disqualification for violating the rules governing them, unless prior written consent is obtained or alternate arrangement made (in writing) with the NLC2CMD Competition organizing committee.

11 Release of New Data

All participants and teams agree to release any new data that is generated as part of the competition, and the latest time for such release shall be prior to the commencement of the test data phase, also known as “Stage 3” (Section 6.3).

Such data shall include but is not limited to data that teams shall use to validate, train, and tune their entries to the competition; and any other resources that teams shall use.

Participants may create their own datasets. However, they must be made available publicly, conforming to the conditions laid out in this document.

Any additional data, if they are of the form of natural language text mapped to corresponding user commands, must conform to the style and format of the provided open data.

For other innovative forms of data that participants may have used, a format shall be decided at the time of release at the discretion of the team that owns the data (with possible inputs from the organizing team).

Any exceptions to this condition, for any reasons, shall be pre-cleared in writing with the NLC2CMD Competition committee.

12 Licensing

All participants must follow the [MIT License](#)² for their contribution.

All participants commit to releasing all code associated with their entries (to the NLC2CMD Competition @ NeurIPS 2020) under the terms of the MIT License at the end of the competition.

[Project CLAI](#)³ already follows the MIT License, while the [baseline NL2Bash](#)⁴ code base is licensed under the GNU General Public License v3.0, which is compatible to any further modifications under the MIT License for the competition.

The [NL2Bash data](#)⁵ is updated to adhere to the MIT License.

The MIT License is reproduced here in full, and participants and teams are deemed to have accepted it by agreement to these terms and conditions via signature in Section 18.

Begin license text.

Copyright <YEAR> <COPYRIGHT HOLDER>

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End license text.

13 Plagiarism

Plagiarism in any form shall not be allowed.

Any entry found to be engaging in plagiarism of any form shall be disqualified immediately from the competition, and further action may be initiated.

²<https://opensource.org/licenses/MIT>

³<http://ibm.biz/clai-home>

⁴<https://github.com/TellinaTool/nl2bash/>

⁵<https://github.com/TellinaTool/nl2bash/blob/master/data/bash/LICENSE>

All code will be checked for plagiarism using MOSS.⁶

Other potential forms of cheating, such as exceeding submission limits on evaluations by using multiple accounts, will be handled by providing each participating team a unique ID to use in their metadata that will be verified by the evaluation script. The EvalAI platform allows standard methods⁷ to perform such checks against potential cheating.

Teams found to be in violation of the rules governing plagiarism shall be disqualified immediately from the competition.

14 Mutual Exclusion of NLC2CMD Challenge and Competition

Entry to the NLC2CMD Competition @ NeurIPS 2020 shall be mutually exclusive with entry to the NLC2CMD Competition Challenge, herein also referred to as the *challenge*.

No participant that contributes an entry to the challenge shall be allowed to take part in the competition.

No participant who takes part in the competition shall be allowed to submit entries to the challenge.

Such collusion shall include but not be limited to sharing or exchange of data or any information otherwise that may expose data submitted to the challenge to the participant, or vice-versa.

Persons violating these requirements – whether knowingly or unknowingly – shall have their entries disqualified from both the competition and the challenge, as applicable.

Participants – in their own quest to find data for their models – shall not engage in collaborating or colluding with those persons that have contributed data to the NLC2CMD Competition challenge. Participants shall have no knowledge of data submitted to the challenge, nor shall they seek out such data. Participants coming into inadvertent knowledge of such data shall disclose this immediately to the competition organizers.

The terms and conditions for the challenge shall be found on the challenge sub-section of the competition website.

14.1 Collusion

No participant in the competition shall collude with any person who has submitted entries to the challenge.

No participant or team thus constituted shall collude, coordinate, or otherwise agree with other participants and/or teams to underperform or otherwise influence the outcome of the competition standings in any manner other than by submitting their own individual entries in the manners prescribed.

Any coordination between persons not on the same team; or between teams; shall be grounds for disqualification.

⁶MOSS: <https://theory.stanford.edu/~aiken/moss/>

⁷EvalAI metadata: <https://readthedocs.org/projects/evalai/downloads/pdf/latest/#page=22>

14.2 Data Leaks

Participants shall commit to avoiding data leaks.

If any potential data leaks come to the notice of a participant, that participant shall notify the NLC2CMD Competition organizers immediately in writing.

Any participant found to have knowledge of a data leak, and who has not communicated such knowledge to the organizers, shall be disqualified along with their entries, irrespective of whether such leak shall have had a material effect on their submission or not.

15 Prizes

(Some articles in this section are adapted from the [rules of the Lyft 3D Object Detection for Autonomous Vehicles competition](#))

Payments to potential winners are subject to the express requirement that they submit all documentation requested by Competition Sponsor for compliance with applicable state, federal, local and foreign (including provincial) tax reporting and withholding requirements.

Prizes will be net of any taxes that Competition Sponsor is required by law to withhold.

If a potential winner fails to provide any required documentation or comply with applicable laws, the Prize may be forfeited and Competition Sponsor may select an alternative potential winner.

The winner – or recipients of any prize of monetary or other worth that shall be taxable – is responsible for all applicable taxes, in whichever (and possibly multiple) jurisdiction as they may apply. IBM or the NLC2CMD Competition @ NeurIPS 2020 shall not be responsible for any taxes.

No purchase necessary to enter or win.

For the judging criteria on selecting winners, please refer to the competition website (c.f. Section 5).

For a description of the prizes to be awarded, including their number and monetary value, please see Section 15.1.

By accepting these terms and conditions, winners grant IBM the right to use their names and/or photos for the exclusive purpose of publicizing them in relation to the NLC2CMD Competition @ NeurIPS 2020.

15.1 Number of Prizes & Monetary Value

The total prize money pot for the NLC2CMD Competition @ NeurIPS 2020 shall be 7,000 USD (US Dollars). The prizes shall be split up by track (see Section 7) as follows:

15.1.1 Prizes for Track 1: Accuracy

For the accuracy track, there shall be 2 (two) prizes, awarded to the two top teams in descending order of accuracy metric. Each prize shall consist of a cash award of 2,500 USD to the prize-

winning team.

Ties (beyond the top 2 teams) shall be resolved as stated in Section 8.1; the total prize pool available for this track shall remain constant as stated in this section.

The team with the highest accuracy shall also be awarded a place in the Project CLAI⁸ skills catalog.

15.1.2 Prizes for Track 2: Efficiency

For the efficiency track, there shall be 1 (one) prize, awarded to the top team in descending order of efficiency metric. The prize shall consist of a cash award of 2,000 USD to the prize-winning team.

Ties shall be resolved as stated in Section 8.1; the total prize pool available for this track shall remain constant as stated in this section.

16 Other Terms

EvalAI has a privacy policy that governs the collection and usage of Personally Identifiable Information on their platform. The policy is available at [their website](#)⁹.

17 General Conditions

All laws and regulations that are applicable at various levels (local, state, national/federal) that are not otherwise mentioned in this document still apply.

⁸<https://github.com/ibm/clai>

⁹<https://evalai.cloudcv.org/privacy-policy>

18 Acceptance

Any change to this contract shall be subject to mutual written agreement of the parties — where parties shall consist of the undersigned (on behalf of a team, if applicable), and the NLC2CMD Competition @ NeurIPS 2020.

The undersigned agrees to the terms of this agreement on behalf of their team (and all entrants and entities thereof) as of the date written below:

The Entrant(s)

Team Name (optional): _____

Signature: _____

Print Name: _____

Title: _____

Date: _____

Additional Signatures

If there are additional team members and signatures, please sign, date, and print your name; and attach this to the blank space beyond this line.