



QUALIFIER INFO PACK

7 June 2020



QUALIFIER INFORMATION

- Qualifying Period: **7 June 2020, 1500h to 20 June 2020, 1400h**
- Prizes at the Finals on 5 July 2020:

Category	JC/IP/ITE	Uni/Poly
Champion	S\$4,000	S\$8,000
1st Runner-up	S\$2,000	S\$4,000
2nd Runner-up	-	S\$2,000
Consolation (3 prizes)	-	S\$1,000

- We have 1 golden rule: no collusion
- Please use your TIL 2020 Team Name on Kaggle for us to identify your team
- URL: <https://www.kaggle.com/c/til2020>

SCORING AND LEADERBOARD - GENERAL

1. You need to submit both CV and NLP tasks in the qualifier.
2. We will be adopting a weighted score: 60% CV and 40% NLP for the consolidated score on the leaderboard, which will be updated in MS Teams by the following timings:
 - 14 June 2020 (Sun), 1400h
 - 18 June 2020 (Thu), 1400h

SCORING AND LEADERBOARD - CV

1. CV will be evaluated using mAP, and you will need to submit your JSON files by the following timings for the interim and final evaluations:
 - Interim Evaluation 1: 13 June 2020 (Sat), 1400h
 - Interim Evaluation 2: 17 June 2020 (Wed), 1400h
 - Final Evaluation: 20 June 2020 (Sat), 1400h
2. The submission site will be shared via MS Teams at a later date.
3. The CV evaluation datasets will be released at the following timings:
 - Interim Evaluations: 1,000 images will be released on 13 June 2020 (Sat), 1200h
 - Final Evaluation: 1,500 images will be released on 20 June 2020 (Sat), 1200h

SCORING AND LEADERBOARD - NLP

1. NLP will be evaluated using AUC-ROC score by submitting through Kaggle, where you may see live scoring and leaderboard for the NLP component.
2. We will be providing word embeddings (instead of text), which is intended to save effort on data pre-processing. This also means that you may not need to source for open datasets for the NLP component.

FAQ - Qualifying Criteria

1. How many teams are there in each category?

> Currently we have 18 JC/IP/ITE teams, and 92 Uni/Poly teams. We will progress proportionally to qualify 16 teams, i.e. 3 teams from JC/IP/ITE and 13 teams from Uni/Poly to semi-finals on 4 July 2020.

FAQ - Model

1. Which will be of higher priority --- model accuracy, model size or inference speed?
 - > For qualifier, the evaluation is based on model accuracy; however model size/inference speed may be important during Semi-/Finals.
2. Will our qualifier models be used on the robot?
 - > Yes, qualified teams will apply/adapt their models onto the robots, instead of re-working.
3. Are there any practical concerns, e.g. compatibility?
 - > We recommend that models use tensorflow code, as this will be best evaluated during Semi-/Finals.
4. Are the CV and NLP tasks independent of one another (i.e. can they be worked on concurrently)?
 - > Yes, the tasks are independent of one another during the qualifier.

FAQ - Dataset

1. Are the datasets made by DSTA for this competition like last year's?
 - > The NLP dataset is made by DSTA while the CV dataset uses open datasets annotated by DSTA.
2. What is the format of the CV datasets provided for the qualifier?
 - > It will be COCO format.
3. Will data cleaning be required?
 - > You may choose to perform data cleaning, if it is required for your models.
4. Can we use open datasets?
 - > Yes, you may. However please adhere to the respective citations/attributions required of the open datasets you may choose to use.

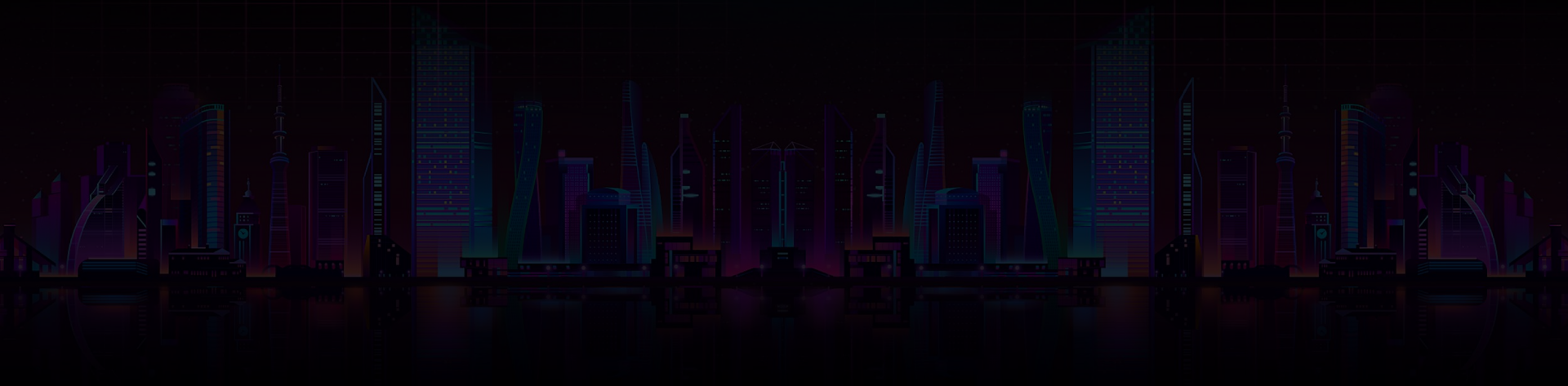
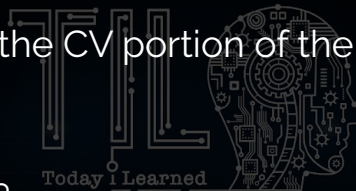
FAQ - CV

1. Is the FashionOD the dataset for the CV portion of the competition?

> Yes.

2. Will there be OCR in the CV task?

> No.



FAQ - Coding

1. Will there be a penalty to take codes from Kaggle?

> No. We encourage teams to learn from and contribute back to the wider AI community. Similar to open datasets, please adhere to the respective citations/attributions required of open-source codes you may choose to use.

FAQ - Semi-/Finals (aka Robotics Challenge)

1. What is the robot?
 - > We are using DJI's RoboMaster EP and TELLO EDU.
2. What is the difference between the qualifier and robotics challenge?
 - > You will be adapting your qualifier codes and deploying them onto the robot/drone to perform tasks within an arena.
3. How will CV and NLP be linked together during the Robotics Challenge?
 - > CV and NLP will be linked together to perform a rescue task, e.g. object detection and text understanding to facilitate path-finding, search and evacuation.
4. How much 'hardware knowledge' is required for the robotics challenge?
 - > The interface between your AI models and the robots will be provided. We will also be providing familiarisation sessions for the robot, during which you will learn how to control them through python codes.

FAQ - Miscellaneous

1. Must we use the AWS accounts or is it just a platform provided to us if we want to use it for training?
 - > It is not mandatory to use AWS for the qualifier, and it is a platform if you wish to use it for training. You may also use your own machines or other cloud platforms, e.g. Kaggle (30 hrs of GPU/week) or Google Colab.
 - > Do remember to turn off AWS cloud services when you are not using them, to avoid using up all your credits or incurring extra charges.
2. Do the accounts have an upper limit on the kind of compute resources we can use like last year (besides the amount of credits)?
 - > The arrangement with AWS is similar to TIL 2019, where the higher tier GPU can be accessed via a AWS free-tier account (non-Educate) for the team. You may then load the credit codes to offset the GPU compute costs.

FAQ - Additional info on AWS Accounts and Credit Codes

1. **AWS Educate Starter Account Sign-up** (<https://bit.ly/3bs4ubS>): This will act as a resource point and comes with USD \$100 promotional credits per account. All participants should sign-up to learn even after the BrainHack 2020 and use the credits here to do test runs or POCs. If the credits suffice you can use this portal to work on the challenges. However, you will not be able to view the billing dashboard as there are no credit card details and you will not have access to it due to the account configurations. You may check on the remaining credit balance by logging in to your AWS Educate account and clicking on 'AWS Account'.

Now if you are using more intense GPUs, then you will have to:

2. **Setup an AWS free-tier Account per team**: We recommend each team, not participant, to create an AWS free-tier account and you can follow the steps here: [Create and Activate an AWS Account](#). Once setup is done, you can follow this [VIDEO](#) to load the credit codes and each team will get USD \$100 in that account to work on the challenge.



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ALL THE BEST!

