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DSTA STRATEGY IN ACTION

Qualifiers Info Pack

Today-I-Learnt 2023 (TIL2023)

Content:

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Welcome Message

Welcome to DSTA's highly anticipated BrainHack TIL 2023!

You are tasked with security management of a high level conference between foreign delegates held at "*Crown Renaissance Resort*". You have received reports that a terrorist organisation is planning to kidnap *Mr. Dastan*, the President of *United AI,* who chairs the conference. The intelligence team has also managed to retrieve pictures of the kidnapper, also known as "*White Stinger*".

Your task is to prepare for a search-and-rescue mission in the event that *Mr. Dastan* is kidnapped. To achieve this, two models are needed:

- Computer vision models that are able to detect and identify (1) *Mr. Dastan*, and (2) *White Stinger*.
- Automatic speech recognition model to interpret your intelligence team's communications about the whereabouts of *Mr. Dastan*

We are thrilled to have you join us in this exciting event, where you will be able to learn from and compete against like-minded individuals in the field. Best of luck to all participants, and may the best AI win!

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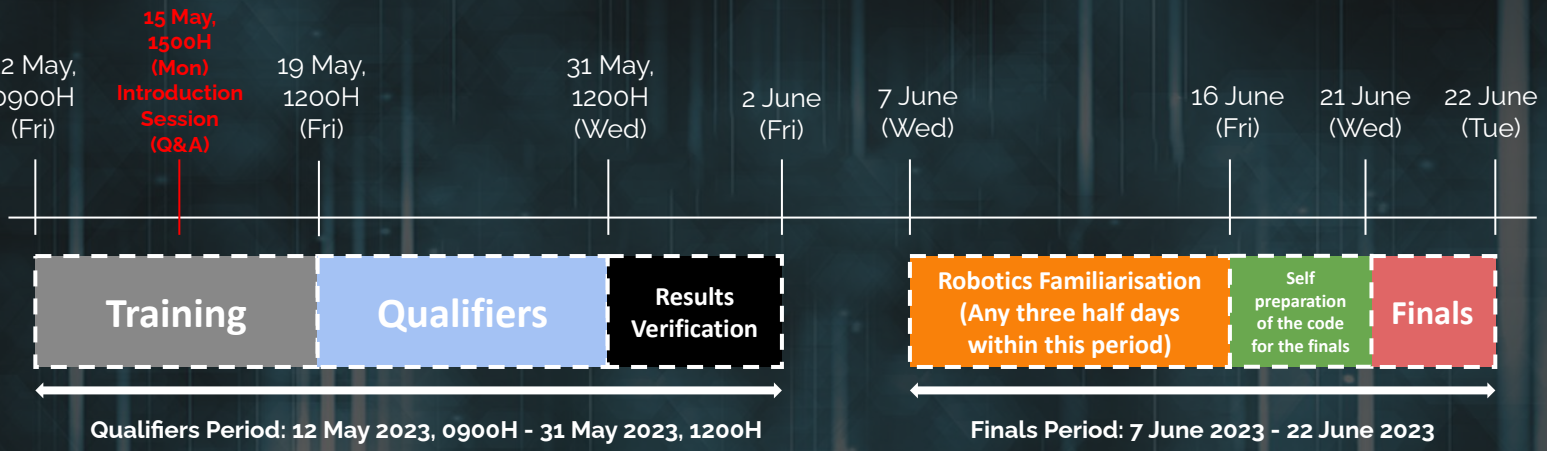
Schedule of Activities



Dataset Release: 19 May 2023, 1200H
Submission Deadline: 31 May 2023, 1200H
Announcement of Finalists: By 2 June 2023

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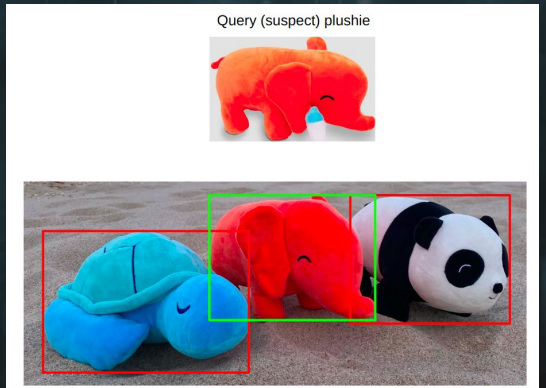
Challenge - Object Detection (OD) & Object Re-identification (ReID)

What is the OD & ReID Challenge About?

1. **Your task is to train two Computer Vision models.**

   a. [OD Model] You will develop an object detection model that **identifies all plushies in the scene** and to use relevant methods to extract these plushies into individual crops to be fed to the ReID model.

   b. [ReID Model] The second model will **identify whether a query plushie crop matches a target plushie crop**, i.e. "is the query plushie in this given current scene?"



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Challenge - Object Detection (OD) & Object Re-identification (ReID)

Dataset Details

Train dataset	5.6k images of 200 plushies, with annotations	You are allowed to include additional data to train your model, terms & conditions apply (refer to https://til-23.github.io/til-23-info-public/qualifiers-intro.html#general-information)
Validation dataset	800 images of 10 plushies, with annotations	For participants to self-assess their models
Test dataset	1.6k images of 50 plushies, without annotations	Your model will be graded based on its performance on this dataset

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Challenge - Automatic Speech Recognition (ASR)

What is the ASR Challenge About?

1. Your task is to train one model to perform **Automatic Speech Recognition** (also known as speech-to-text).
2. The datasets given will **only** be audio recordings in **English**. Majority of the recordings are in the intonation of Singapore English.

Train dataset	**3,750 audio clips and its corresponding annotations**	**You are allowed to include additional data to train your model, terms & conditions apply (refer to https://til-23.github.io/til-23-info-public/qualifiers-intro.html#general-information)**
Test dataset	**12,000 audio clips with NO annotations**	**Your model will be graded based on its performance on this dataset**

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Resources You Should Be Expecting For the Challenges

1. Self Learning Training Videos (hosted on competition platform)
2. Technical Documentation of the Competition (https://til-23.github.io/til-23-info-public/)
3. Boilerplate code repositories
4. Online Development Platform

More information including links for 1, 3 and 4 will be provided in separate emails.

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Channels for Communication

1. Brainhack TIL Email: BH-TIL-AI@dsta.gov.sg
2. Discord Server
3. Your Mentor (CC-ed in the email titled: "*Welcome to Brainhack Today-I-Learned Artificial Intelligence 2023!*")

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Important Note to Participants

Code of Conduct

1. Do not plagiarise code from other teams
2. Do not share your models with other teams
3. Do not manually annotate the test set
4. Do not purchase any of your own datasets

Teams found to have violated any of the above will be liable for disqualification.

Important Notice

To ensure fairness, all developed codes used for the competition must be runnable on the provided online development environment. Failure to do so may also result in disqualification.

For more information, refer to:
https://til-23.github.io/til-23-info-public/qualifiers-intro.html#general-rules

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THANK YOU!