



BUILD ON

THAILAND 2021

BUILDING YOUR FUTURE

CHALLENGE STATEMENTS

Things to note

- Register for the hackathon [here](#) and await for us to contact your team leader. Challenge statements are on a first-come-first-served basis, please register early to avoid disappointment. When a challenge statement is fully subscribed, your team can no longer select it during registration.
- More info will be shared via email on the proposal template and details for submission. If you didn't receive the email, check your junk/spam folder.
- The top 6 teams per company will be [shortlisted based on their proposal](#), to proceed onto prototype development. Regardless if the company has provided 1 or 2 challenge statements, the company can only pick the top 6 teams who worked on their statements, for e.g.
 - Challenge statement A (1 team); Challenge statement B (5 teams)
 - Challenge statement A (3 teams); Challenge statement B (3 teams)
 - Challenge statement A (4 teams); Challenge statement B (2 teams)
 - Challenge statement A (6 teams)
- Subsequently, we will add your team members into the Slack channel for mentorship. You can discuss with your mentors if you require additional help/time from them. The top 6 shortlisted teams will also be provided with an AWS exclusive SWAG box.
- After 2 weeks of prototype development, you will be doing a live pitch against the other 5 teams in the Company Finale. You will be evaluated against [this set of judging metrics](#).
- Additional prizes and internship opportunities may be awarded by the individual companies at their own discretion.
- All hackathon participants will receive a certificate of participation.

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Challenge Statement #1

EdTech

At OpenDurian, We are looking for a new and innovative way to learn with more than 6 million yearly users visit our website.

One of the most ambitious goals of EdTech is to make education more affordable and accessible. Even online learning allows students to attend affordable classes from any location, There are some classes that still need human interactions. i.e. Learn to speak a foreign language rely on a tutor to practice and feedback which is costly and not scalable.

So OpenDurian's challenge for AWS to build on 2021 is to build a tool or application that can help student practice pronounces word or phrase in foreign language. This application should provide a native accent from a particular country. Moreover, it may have a compliment or persuasive reward for learners who pronounce correctly to encourage them to continue learning. And more importantly, this application should be scalable, accessible to majority of Thai student.

[Find out more about OpenDurian here](#)

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Challenge Statement #2

Mask-off detection (Smart City)

During COVID19 pandemic, Singapore/Thailand/Vietnam has made wearing face mask mandatory in public. A lot of surveillance systems are integrating computer vision in order to monitor whether people are wearing masks or not.

Challenge: In this challenge you will build a system that is able to distinguish between people wearing a mask vs people not wearing a mask:

- Train the inference model from a dataset of faces with a mask and without a mask
- Optimize the model for the hardware and deploy the inference model to an edge device.
- For predictions with low confidence, the images are to be sent from the edge to cloud for retraining purposes.

[Find out more about Versent here](#)

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Challenge Statement #3

Carbon footprint insights for Innovative Green Fintech / Food Delivery Carbon Footprint

With

- Singapore's goal of capping Greenhouse Gas (GHG) emissions by 2030 and MAS focusing on Green FinTech
- Thailand's goal of reducing gas emissions by 20% by 2030; and
- Vietnam to cut gas emissions growth by 9% by 2030

Carbon tracking is one of the methods that can help achieve these goals. For businesses, carbon tracking can offset their carbon footprint as a key part of their Corporate Social Responsibility (CSR) strategy. For individuals, carbon tracking can play a vital role in Collective Climate Action.

The COVID-19 pandemic has impacted consumer behavior with increased online shopping, and smaller but more frequent orders. The behavioral change has resulted in the increase of delivery services that contribute to the GHG emissions.

Challenge: In this challenge, you will build a solution to track carbon emissions for a given delivery. It should be user friendly and avoid disrupting the user experience of any delivery services. To encourage opt-in for the delivery, you need to gamify the tracking of carbon emissions. Ideally the solution should provide:

- A mobile app that estimates the carbon emissions for a given delivery, taking into account any factors that can affect emissions. For E.g., the distance travelled, time taken, the vehicle type etc.
- Recording of carbon emissions in an immutable way
- A web app to show the carbon footprint of all deliveries, with identifiable information hashed and obfuscated

[Find out more about Versent here](#)

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Challenge Statement #4

Future of Work

The post-pandemic world is going to be different, especially in how we work. Businesses around the world are readjusting their approaches, cutting down on the unnecessary and doubling up on being lean. Some are taking more radical measures than others. We urge you to imagine the "future of work" where locations, positions, and presence may no longer be needed. Anyone can work from anywhere, performing tasks suitable for their skills and pursuit of self-development. Moreover, we challenge you to think about the world where **total remote work** is the standard. In a very near future, what would this world be like?

[Find out more about depa here](#)