# S&S COE AI/ML Engineer Take Home Assessment

# Technical Paper Review

## Instruction

- Please answer the following four questions
- Do keep to the word limit as specified in each question
- You are free to make references to any other relevant technical literature
- Please complete the assignment and email the required deliverables within 7 calendar days upon receiving this email
- Reach out to us if you have any queries via email:
  Benjamin Cham: Benjamin_CHAM@htx.gov.sg
  Koa Ming Di: Koa_ming_di@htx.gov.sg

## Background

As an engineer in HTX S&S COE team, you are expected to keep abreast with the latest AI and Deep Learning developments. This includes keeping track and reading conference papers published in major global conferences to learn about the new techniques and be able to replicate the technical findings.

## Assessment Instruction

You are tasked to review the academic/conference paper provided. Here are the requirements:

1. You are required to answer three questions given in this document.
2. Keep to the number of words stated for each question
3. When completed, **convert the Word document to PDF** and name the PDF file in the format <yyyymmdd-name> where:
   - name = your full name
   - yyyymmdd= submission date in year (yyyy), month (mm) and day (dd) format.

   For example, if your name is Timothy Lim and your submission deadline is supposed to be 16th February 2023, you need to label your file as "20230216-Timothy Lim.pdf"
4. Submit the PDF:
   Benjamin Cham: Benjamin_CHAM@HomeTeamSnT.onmicrosoft.com
   Koa Ming Di: koa_ming_di@HomeTeamSnT.onmicrosoft.com

## Questions

1. In 400 words or less, describe the problem the authors are trying to solve, the solution(s) proposed by the author, and their main considerations.

2. The paper claims to perform better than other methods. What quality assessment metric were used in this paper? Describe in 400 words or less the quality metric used for evaluation and how they were computed.

3. Describe in 400 words or less a possible use-case for HomeTeam departments that would require the technology presented in this paper.