



NANYANG
TECHNOLOGICAL
UNIVERSITY
SINGAPORE

BUS VACANCY CHECKER

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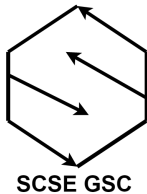
SCSE GSC

GSA Graduate
Students
Association



Problem Statement

1. Addressing UN SDG 11
2. Targeting users of campus buses in NTU
3. Aims:
 - a. Minimize waiting time
 - b. Minimize Fuel Wastage
 - c. Minimize overcrowding of buses in peak hours



Solution

1. Backend computer vision system inside the buses at each door which detects the number of people entering and leaving the buses.
2. Frontend application for users showing the crowd in the incoming buses so that users can find an alternative if they are full.
3. Backend database which can be used in the future for predicting demand of buses using machine learning techniques.

