



NATIONAL ROBOTICS COMPETITION

NRC COSPACE ROBOT CHALLENGE TERTIARY CATEGORY (Autonomous Driving Challenge) SMART TRANSPORTATION



Version: 6 May 2024

Organised by:



SP Singapore Polytechnic

Sponsored by:



Ministry of Education
SINGAPORE

Supported by:



NRC 2024 TERTIARY CATEGORY CHALLENGE BOOKLET CHANGE LOG

Version	Release Date	Description
1.0	6 May 2024	Official Challenge Booklet release

NRC CoSpace Robot Challenge Rules 2024 (Autonomous Diving Category – Tertiary Level)

The RCAP CoSpace Autonomous Delivery (ADL) Challenge is blending mobile robots and supply chain management. Vehicle-road coordination system provided by CoSpace Autonomous Delivery platform allows participants from Secondary, Tertiary and University to better study AI problems such as path planning and dynamic planning.

In RCAP CoSpace Autonomous Delivery Challenge, teams need to develop and program appropriate strategies for robots based on the Intelligent transportation system (ITS) provided by CoSpace platform. In the last mile delivery and smart city scenarios build by CoSpace, robots need to deliver parcels from Distribution Centre to Collection Station with maximum efficiency.

The RCAP CoSpace ADL Simulator is the only official platform for the sub-league. This simulator allows programs to be developed using a graphical programming interface or C language.



Figure 1: RCAP CoSpace ADL Challenge, U19

For details, refer to the official rules:

https://robocupap.org/Rule_Book/RCAP_CoSpace_Auto_Delivery.pdf

Contact us:

Rule clarification: cospace@robocupsg.org

Technical support: support@CoSpaceRobot.org