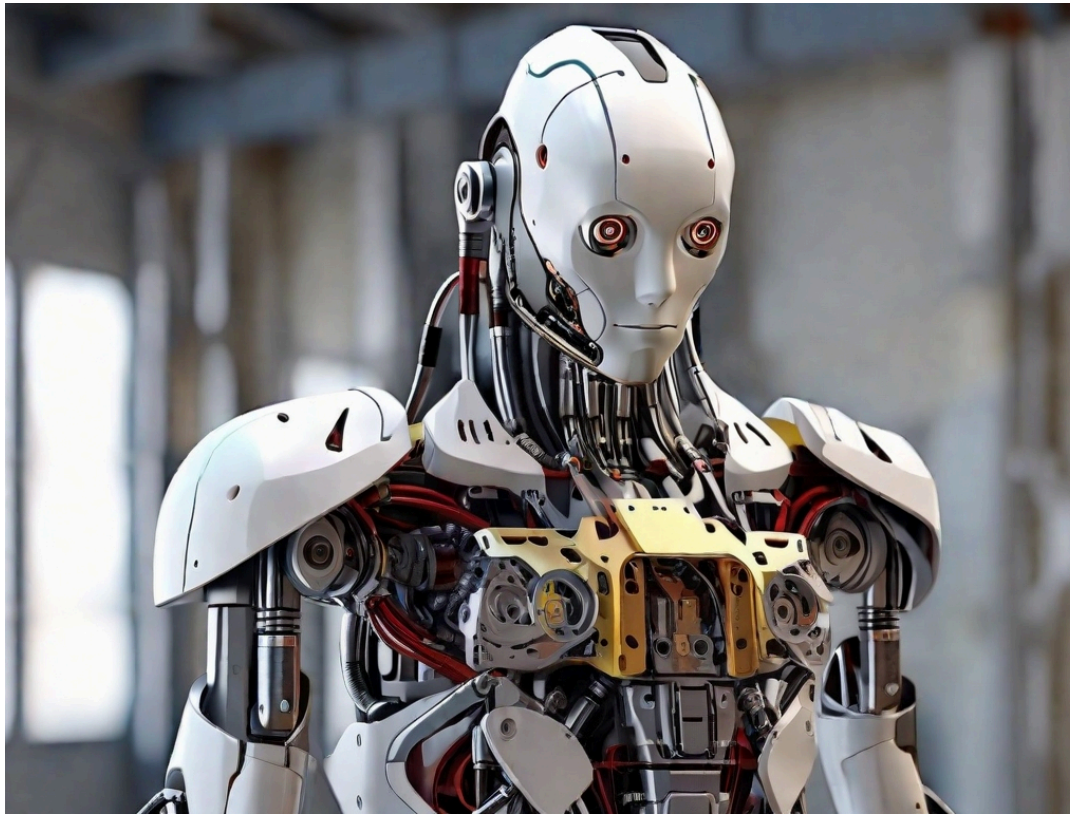

Robot Assembly Exporting

Estimated time to completion: **1 minute**

8.1 Introduction



Welcome to **Unit 8: Robot Assembly Exporting!**

In many real-world applications, you'll need to create a **ROS-compatible URDF** for a physical robot. However, manually writing a URDF file for a complex **CAD-designed** robot can be tedious and error-prone. To streamline this process, we can **automatically export** robot assemblies from CAD software to URDF.

In this unit, you'll learn how to:

- Export robot assemblies to **URDF** instead of creating them manually.
- Use **OnShape**, a free cloud-based CAD software, to generate URDF models.
- Ensure that your exported models are properly structured for use in **ROS 2 and Gazebo**.

By the end of this unit, you'll have a **faster, more efficient** workflow for turning CAD models into **ROS-compatible robot descriptions**, saving time and reducing errors. Let's get started!

16/11/2023

