

Welcome to the Robotics and AI Handbook

Chapter 1: Introduction to Robotics

Robotics is an interdisciplinary branch of engineering and science that includes mechanical engineering,

Chapter 2: Artificial Intelligence in Robotics

Artificial intelligence (AI) in robotics is the combination of sensors, software, and data-processing capa-

Chapter 3: ROS 2 Fundamentals

ROS 2 (Robot Operating System 2) is flexible framework for writing robot software. It is a collection of

Chapter 4: Digital Twins in Robotics

A digital twin is a virtual representation that serves as the real-time digital counterpart of a physical ob-