

# **SIM-DRIVE KIT: A Custom-Built Steering and Pedal Control System for Realistic Car Simulation**

This project introduces the Sim-Drive Kit—a simple, affordable, and customizable driving controller with a steering wheel, accelerator, and brake. It uses sensors and a microcontroller to accurately capture movement and act as a USB device, working instantly without special drivers.

The team also built a custom car simulation with realistic physics for smooth steering, acceleration, and braking. Together, the hardware and software create a complete, budget-friendly driving simulator for learning, fun, and research.