

4-Day QUANSER ROBOT TRAINING Workshop



MAY 23 TO MAY 26, 2023

Autonomous Vehicles Research Studio

Quanser's new Autonomous Vehicles Research Studio is the ideal solution for academics looking to build an indoor multi-vehicle research lab in a short amount of time.

Consisting of QDrone quadrotors and QBot 3 ground vehicles, ground control station, vision, and safety equipment, the Autonomous Vehicles Research Studio is the only option for research groups looking to jumpstart autonomous robotics research programs and be productive in a very short amount of time.



Self-Driving Car Studio

Accelerate, expand, and sustain self-driving research

- The Quanser Self-Driving Car Studio is the ideal platform to investigate a wide variety of research topics for teaching and academic research in an accessible and relevant way. Use it to jump-start your research or give students authentic hands-on experiences learning about the essentials of self-driving.
- The studio brings you the tools and components you need to test and validate dataset generation, mapping, navigation, machine learning, and other advanced self-driving concepts at home or on campus.



Qarm -

Modern Manipulator Arm for Robotics Courses and Research

Quanser's QArm is a 4 DOF serial robotic manipulator with a tendon-based two-stage gripper and an RGBD camera, designed for modern engineering education and academic research applications.

Leveraging the intuitive graphical interface of Simulink® or expandability of Python™ and ROS, students get a systematic understanding of the design of robotic systems and concepts, including joint control, kinematics, path planning, statics, and dynamics.

QArm comes with comprehensive studio-type course resources to motivate students and provide the basis for interactive challenges. The QArm curriculum is mapped to popular robotics textbooks by Mark Spong and John Craig.



Quanser Training Workshop



Students, faculty, and the trainers

Quanser Self-driving Car Training



Students who participated in the training

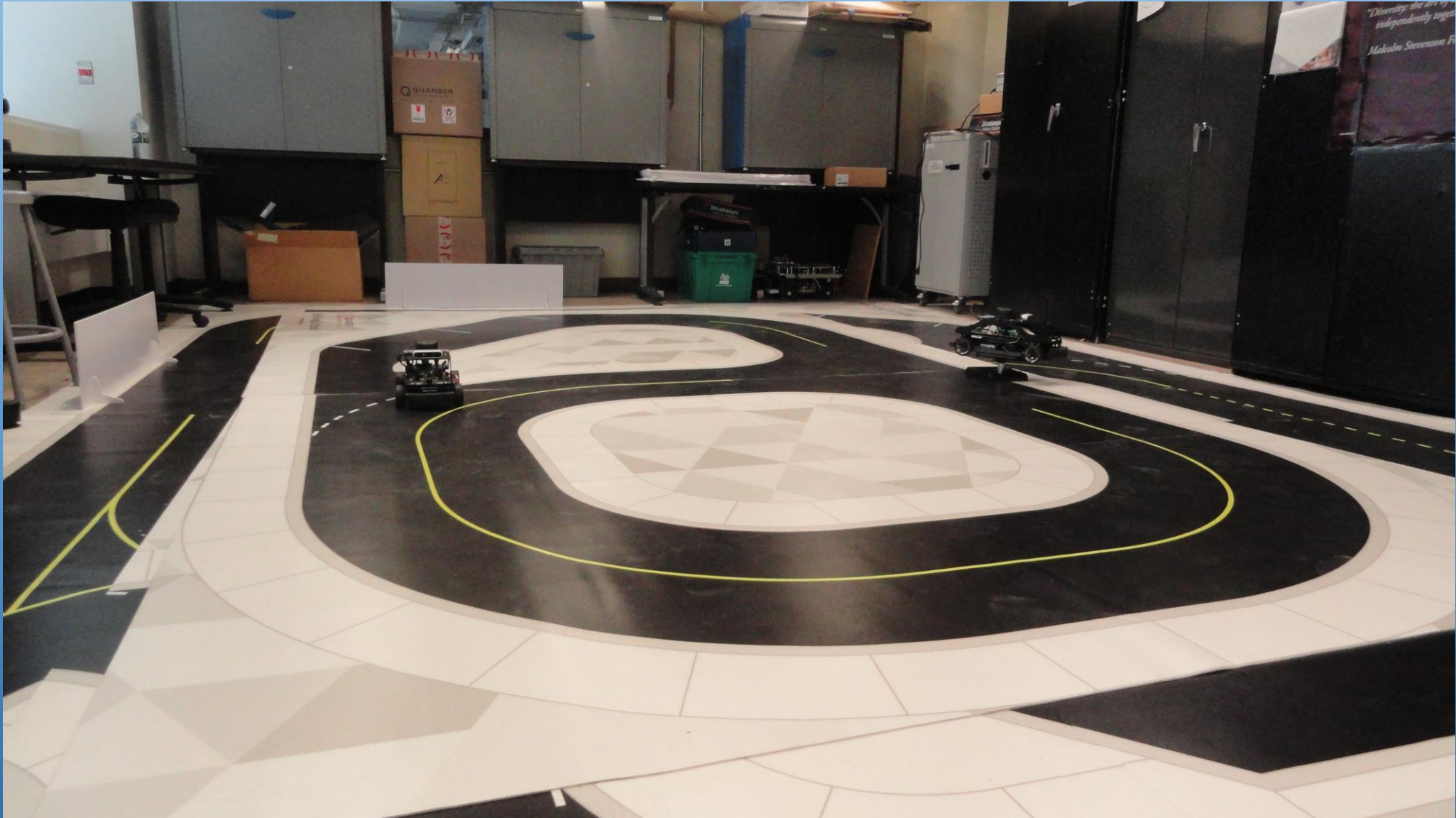
Quanser Self-driving Car Training



Quanser Self-driving Car Training



Quanser Self-driving Car Training

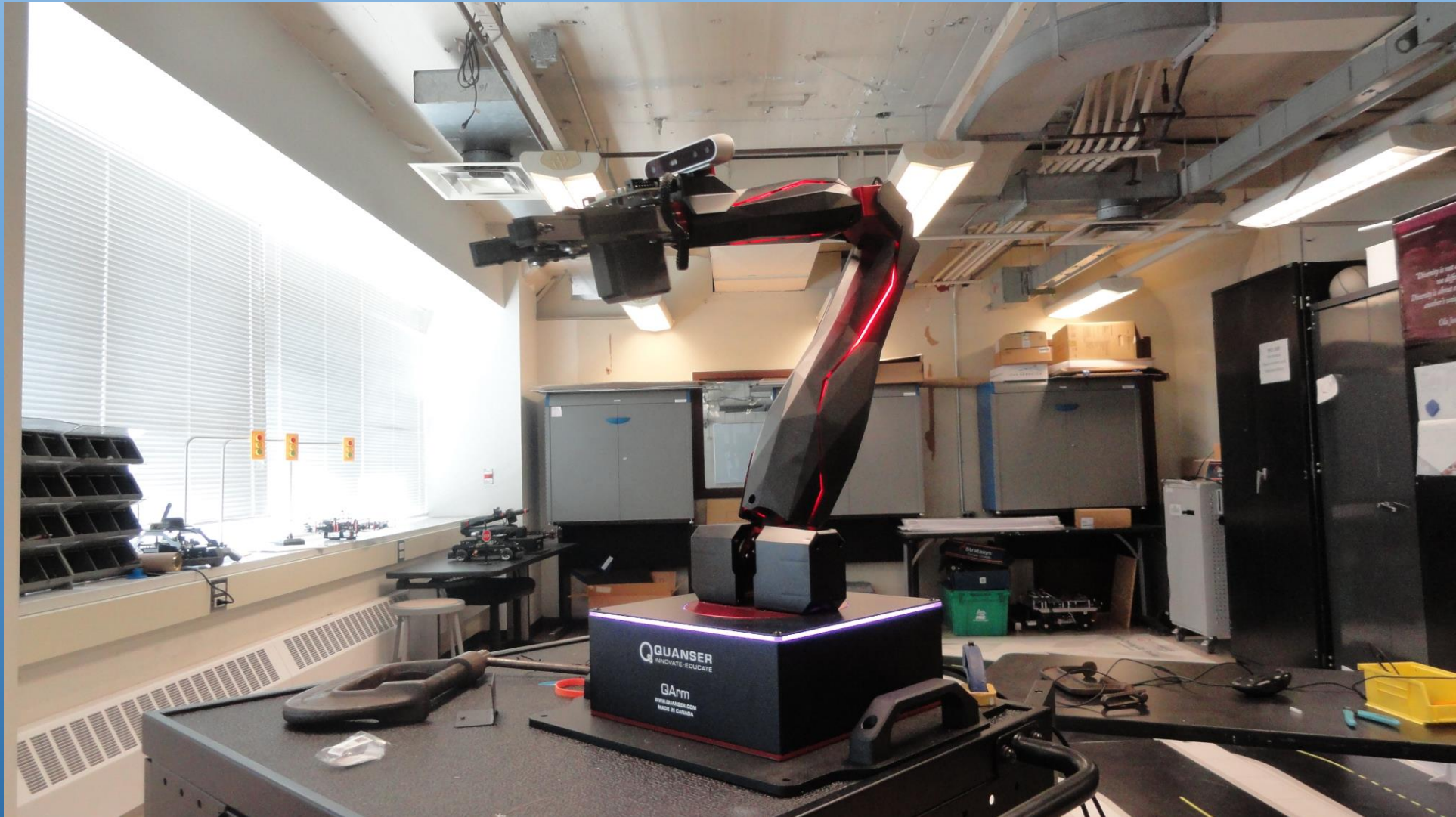


Autonomous Cars in the Field

Quanser Self-driving Car Training



Quanser QArm Training



Quanser Autonomous Vehicles Training



Quanser Autonomous Vehicles Training



Quanser Autonomous Vehicles Training



Acknowledgement

This work was sponsored by the Army Research Office and was accomplished under Grant Number W911NF-22-1-0169.

The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the official policies, either expressed or implied, of the Army Research Office or the U.S. Government.

The U.S. Government is authorized to reproduce and distribute reprints for Government purposes notwithstanding any copyright notation herein.