# MATLAB and Simulink for RoboNation Competitions

MathWorks offers complimentary software and training to all RoboNation Competition teams.

## Key features

- Implement Model-Based Design allowing for rapid algorithm simulations
- Develop computer vision and image processing algorithms for pattern and target identification
- Automate ground truth labeling, perform multi-sensor fusion, and visualize this data using Automated Driving Systems Toolbox
- Deploy algorithms to a desktop computer and various other hardware using automatic code generation
- Design algorithms to determine the location of underwater acoustic signals using Phased Array System Toolbox and DSP System Toolbox
- Communicate with ROS enabled platforms and simulate in Gazebo using the Robotics Systems Toolbox

## More information

- Visit the MATLAB and Simulink Robotics Arena to learn how to use MATLAB and Simulink for robotics and unmanned systems: *mathworks.com/RoboticsArena*
- Training: Designed to help teams use MATLAB and Simulink to tackle competition tasks:
  *mathworks.com/academia/student-competitions/computer-vision-training.html*
- Contact us: *roboticsarena@mathworks.com*
- Connect with us on Facebook: *facebook.com/groups/RoboticsArena/*

### Request software for your team:

*mathworks.com/academia/student-competitions/robonation*