

Army Research Laboratory Robotics Research Collaboration Campus

Overview



Robotics and autonomous systems are already replacing soldiers in performing some tasks and will play a more prominent role on the battlefield of tomorrow. In this era where technology advances at an ever-increasing speed, both government and industry can benefit from collaborating with experts from other sectors to keep pace.

At the Robotics Research Collaboration Campus (R2C2) in White Marsh, Maryland, Army Research Laboratory is building an ecosystem of trusted partners from industry and academia to accelerate scientific developments in robotics and autonomous systems. Here, Army Research Laboratory scientists are working to create the Army's next generation of robotic and autonomous technology.

Conveniently located in the I-95 corridor just north of Washington, DC – part of the busy Northeast Technology Corridor – R2C2 provides an open-campus, collaborative environment with capabilities to support a wide range of autonomous and robotics research and data collection, such as high-performance computing and bandwidth, indoor and outdoor UAV air space, multi-terrain courses, and future air-ground-water interface testing areas. R2C2 also provides collaboration, conference, and classified communication spaces. Other features of the site include:

- Experimental support equipment, scene differentiators, robotic platforms, sensors, hardware and tools
- Semi-permanent/modular urban environment
- Observation and control tower
- Terrain/aerial courses

- High bandwidth network (local, onsite),
- Robust sensory, ground truth and camera network
- Virtual and augmented reality equipment and network tie-in

Army Research Laboratory is interested in collaborating with external partner organizations on the following topics:

- Improving ground robot mobility and maneuverability
- Accelerating AI decision-making
- Increasing network security
- Enhancing human-machine collaboration
- Boosting power and propulsion while reducing payload

At R2C2, the best minds in government, industry, and academia collaborate to answer tough science questions and rapidly advance the field of robotics and autonomous systems. Partners include a wide range of organizations to include large research institutions such as University of Maryland, and small start-ups companies. In some cases, there is no cost to partnering with the Army Research Laboratory. Contact us to see if R2C2 is a good fit for you – usarmy.apg.devcom-arl.mbx.r2c2@army.mil or call (410) 306-0093. To learn more about R2C2 or Army Research Laboratory, visit <https://arl.army.mil>.

