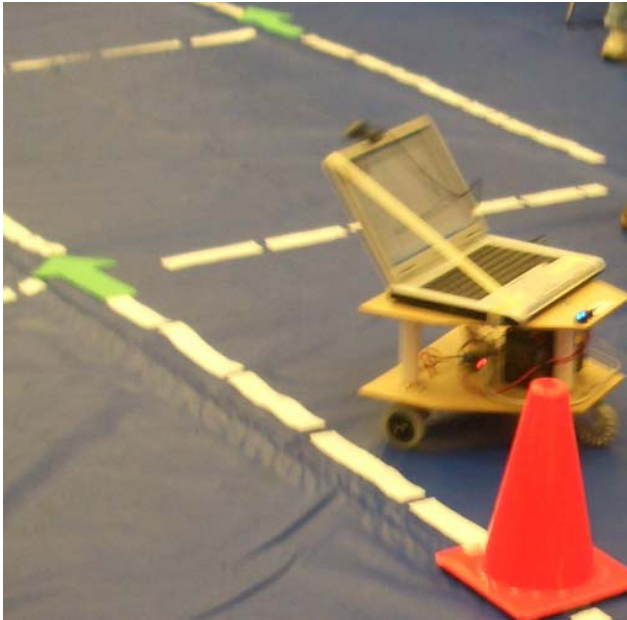
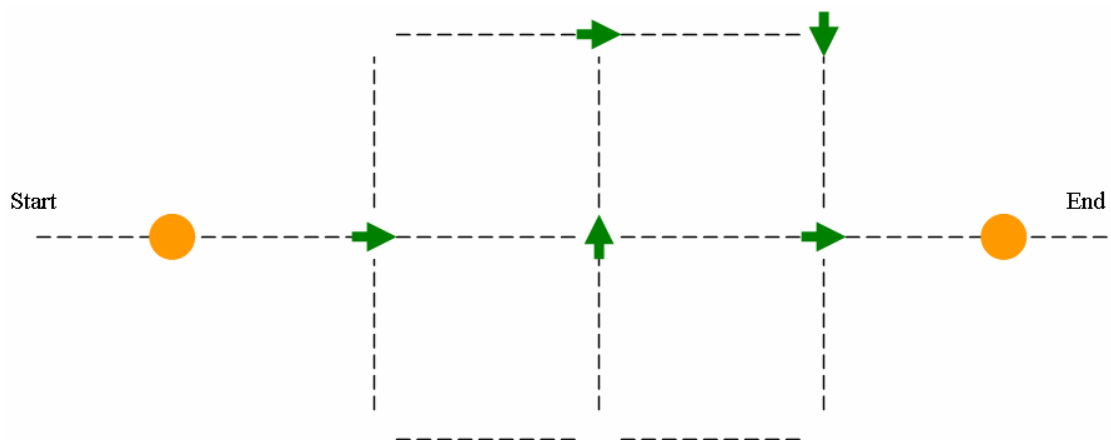


Robofest Mini Urban Challenge for High School & College Students



The Defense Advanced Research Projects Agency (DARPA), the central research and development organization for the US Department of Defense (DoD), organizes the famous DARPA Urban Challenge (UC) where Teams will compete to build an autonomous vehicle able to complete a 60-mile long real-world urban course safely in less than 6 hours.

Inspired by the challenge, Lawrence Tech offers this indoor autonomous robot competition solely based on an onboard CCD camera as a sensor. The contestants are to use a common robotic platform called L2Bot developed by LTU. Students must implement a vision guidance software system to allow the robot to maneuver a given course as shown below as a sample, used in Robofest 2007.



Two orange safety cones and 5 arrows will be placed after the robot starts to follow a path. It must avoid the orange cones. At crossroads, the robot must recognize the directional arrow signs on the ground to continue to reach the goal destination. The winners will be decided by the shortest travel time. The robot must restart from the start point if any failure such as touching the cone, losing the correct path, or going wrong direction occurs. Collegiate challenge will require new/additional tasks.

If you are interested in participating in this advanced competition, please contact Dr. Chung.

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The event will be held, tentatively, on Tuesday December 18th 6 p.m. at Lawrence Tech University, Southfield Michigan. For more details about the L2Bot, please visit <http://www.robofest.net/l2bot>