

GECCO-2010 Demolition Derby

2010 Genetic and Evolutionary Computation Conference
Wednesday – Sunday July 7 –11, 2010 Portland, Oregon, USA



We are pleased to announce the GECCO-2010 Demolition Derby Competition.

The Goal

The goal of Demolition Derby is simple: wreck all opponent cars by crashing into them without getting wrecked yourself.

To provide spectacular and entertaining non-stop action, Demolition Derby takes place on a very small circular track (surface: asphalt, length: 640m, width: 90m, number of laps: 1000) and includes special changes in comparison to the regular racing competition:

1. The range of the 36 opponent sensors has been increased to 300m.
2. Cars do not take any damage when colliding with walls.
3. Cars do not take any damage in the front when colliding with each other.
4. Cars do take the doubled amount of damage in the rear when colliding with each other.
5. The last car standing is declared winner of the match.

All racing controllers participating in Demolition Derby have to qualify for the final showdown match by competing with each other in preliminary 1-vs-1-matches. The best eight controllers then fight each other at the same time in the final match. The last car standing in the final match is declared Winner of the GECCO-2010 Demolition Derby Competition.

Rules and Regulations

The competition is split into two phases: the preliminary 1-vs-1-matches and the final all-vs-all-match of the best eight controllers.

In the preliminary 1-vs-1-matches, every controller drives against every other controller, one at a time. After each match, the car with less damage is declared winner and earns one point. The sum of points earned in all 1-vs-1-matches determines a controller's ranking. Each match has a maximum duration of 15.000 ingame timesteps (5min simulated time).



Sponsor of the GECCO-2010 competitions.

The best eight controllers according to this ranking compete with each other in the final all-vs-all-match. All eight controllers are placed on the track at the same time and, therefore, have to deal with multiple opponents at once. Every time a car gets wrecked, the damage of all other cars is reset to zero.

Winner is the last car standing in the final match, ranking of the other seven cars is determined by the sequence of retirement.

Important Dates

There will be two Demolition Derby competitions, one at GECCO-2010 (Genetic and Evolutionary Computation Conference) and another at CIG-2010 (Symposium on Computational Intelligence and Games):

GECCO-2010 Submission deadline: June 27th 2010

Conference: July 7th-11th 2010

CIG-2010 Submission deadline: August 8th 2010

Conference: August 18th-21st 2010

Competition Software

More information on rules, procedure, and submission dates please are available at the official Demolition Derby website:

<http://www.coboslab.psychologie.uni-wuerzburg.de/competitions/>

For inquiries send an email to dd2010@sigevolution.org

Organizing Committee

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