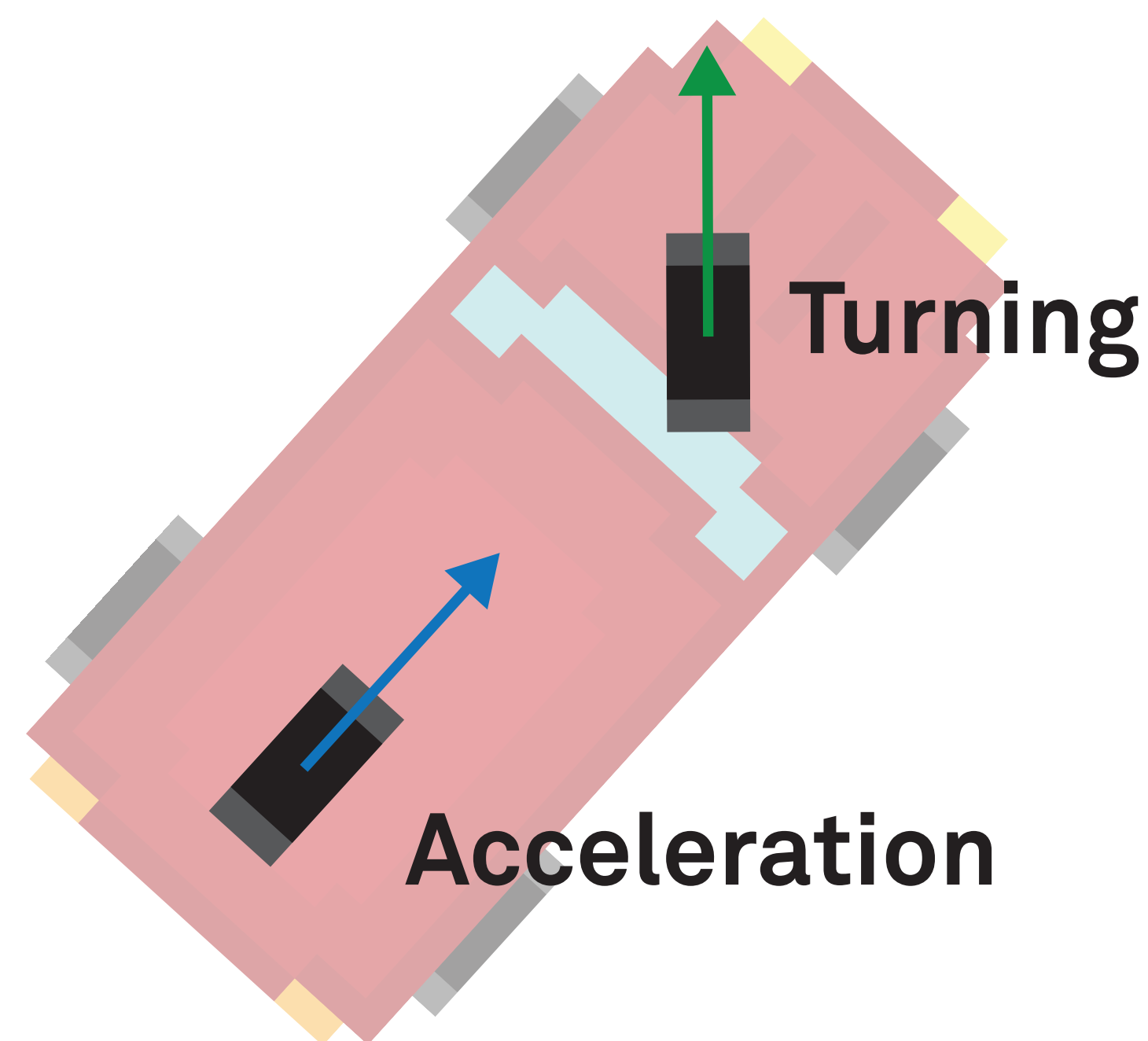# CORN RACER
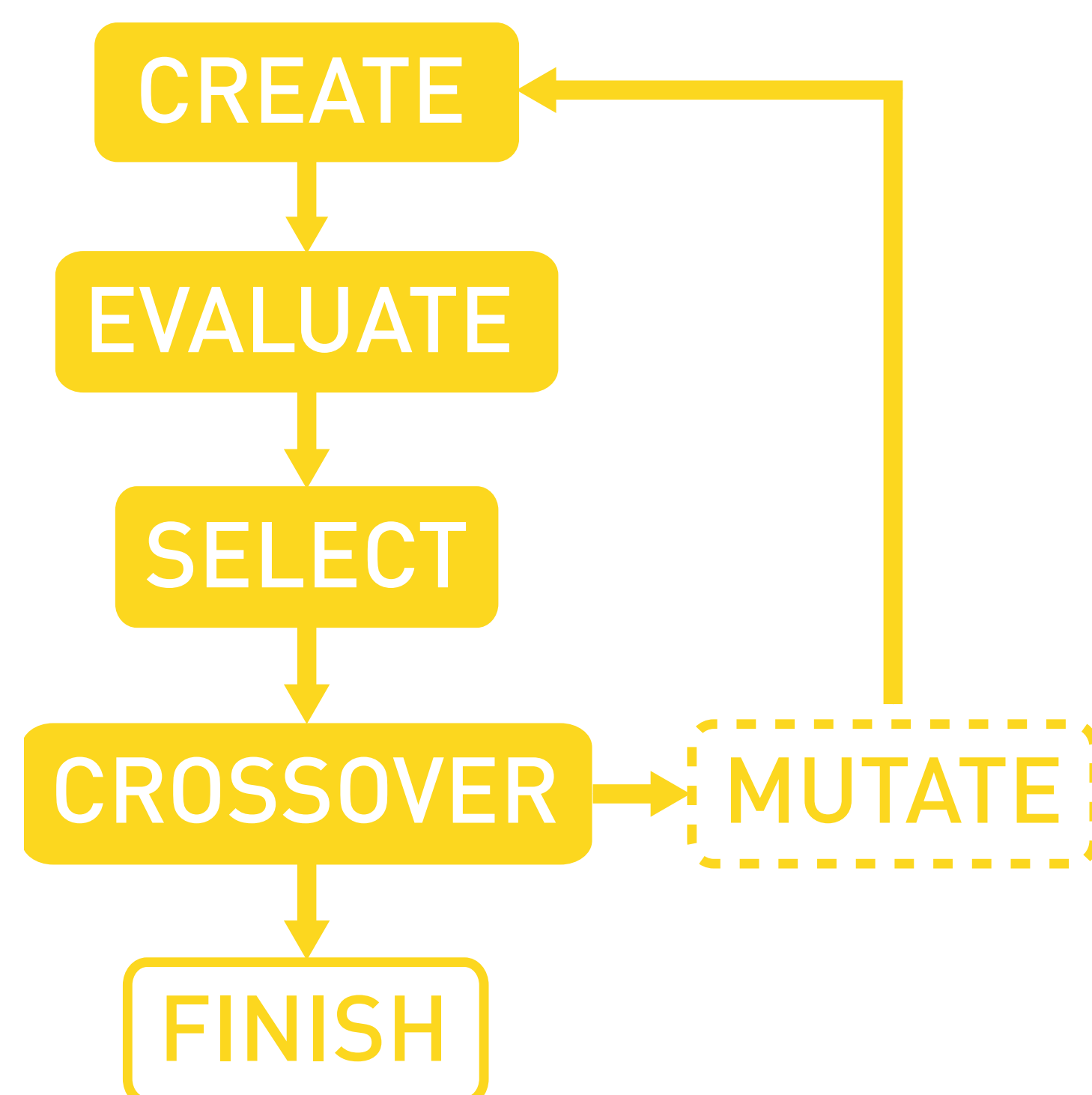
Using evolutionary algorithms to optimize an autonomous car's driving. With lasers.

SIMULATING CAR PHYSICS
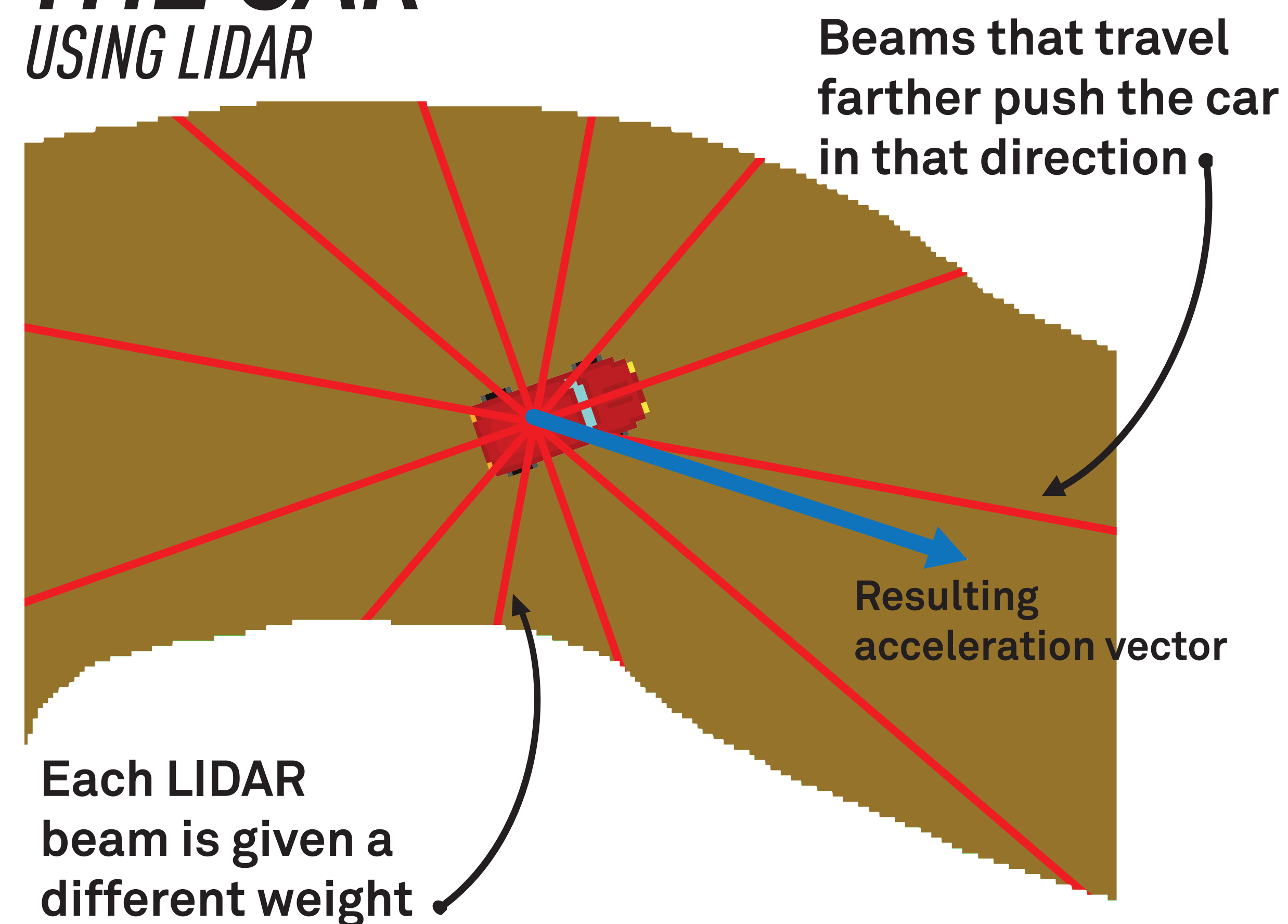*TWO-TIRE MODEL*

Turning

Acceleration

EVOLUTIONARY ALGORITHMS

CREATE

EVALUATE

SELECT

CROSSOVER → MUTATE

FINISH

CONTROLLING THE CAR
USING LIDAR

Beams that travel farther push the car in that direction

Resulting acceleration vector

Each LIDAR beam is given a different weight

WHAT'S IT ABOUT?

Corn Racer combines evolutionary algorithms and physics modelling to simulate an autonomous car driving on a track. Users also have the option to create their own tracks by hand, and to drive manually on tracks by using the arrow keys.

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