

ICFP Programming Contest 2019

Taking Control with Teleports

Version 1.0

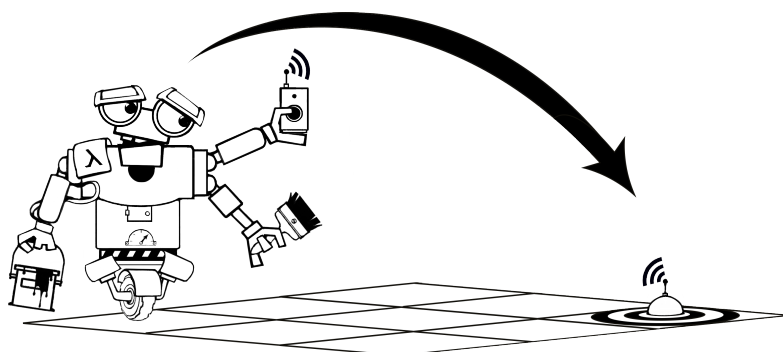
ICFP Programming Contest Organisers

June 21, 2019, 5:00pm UTC

A new pack of maps has been delivered to us, and we still need your help to navigate the worker-wrapper. These new maps feature a new kind of booster, which might prove useful.

New booster: Teleports

Code: R



Effect: This booster uses cutting-edge technology to take control over the worker-wrapper's movement in space, by using two commands: *shift* and *reset*. The *reset* command must be executed first; it requires a worker-wrapper to spend the booster, permanently installing a teleport beacon at the present location of the worker-wrapper. Once this is done, the *shift* operation can be invoked from any location on the map, and, provided the coordinates of the previously installed teleport beacon, will immediately move the worker-wrapper back to the beacon location. Teleportation via *shift* takes one unit of time and can be performed an arbitrary number of times. One can install as many teleports as one has boosters. New teleports cannot be created in locations containing previously installed teleports or mysterious points (X).

Extended task format

BoosterCode ::= ... | R

Extended solution format

action ::= ...
| R (perform *reset* operation to install a beacon)
| T(*x*, *y*) (perform *shift* to the location (*x*, *y*) with the previously installed beacon)

Example

An example task with teleports and its solution is given in the following archive:

<https://icfpcontest2019.github.io/download/part-2-teleports-examples.zip>

More tasks

The second pack with 70 maps featuring teleports is now available at

<https://icfpcontest2019.github.io/download/part-2-teleports.zip>