

Solving the MDETools Challenge using Embedded Engineer

Thomas Fellner (Bernhard Wally on behalf of LieberLieber Software GmbH)

Christian Doppler Laboratory for Model-Integrated Smart Production

Institute of Information Systems Engineering

TU Wien

Favoritenstraße 9-11/E194

1040 Vienna

MDETools Challenge

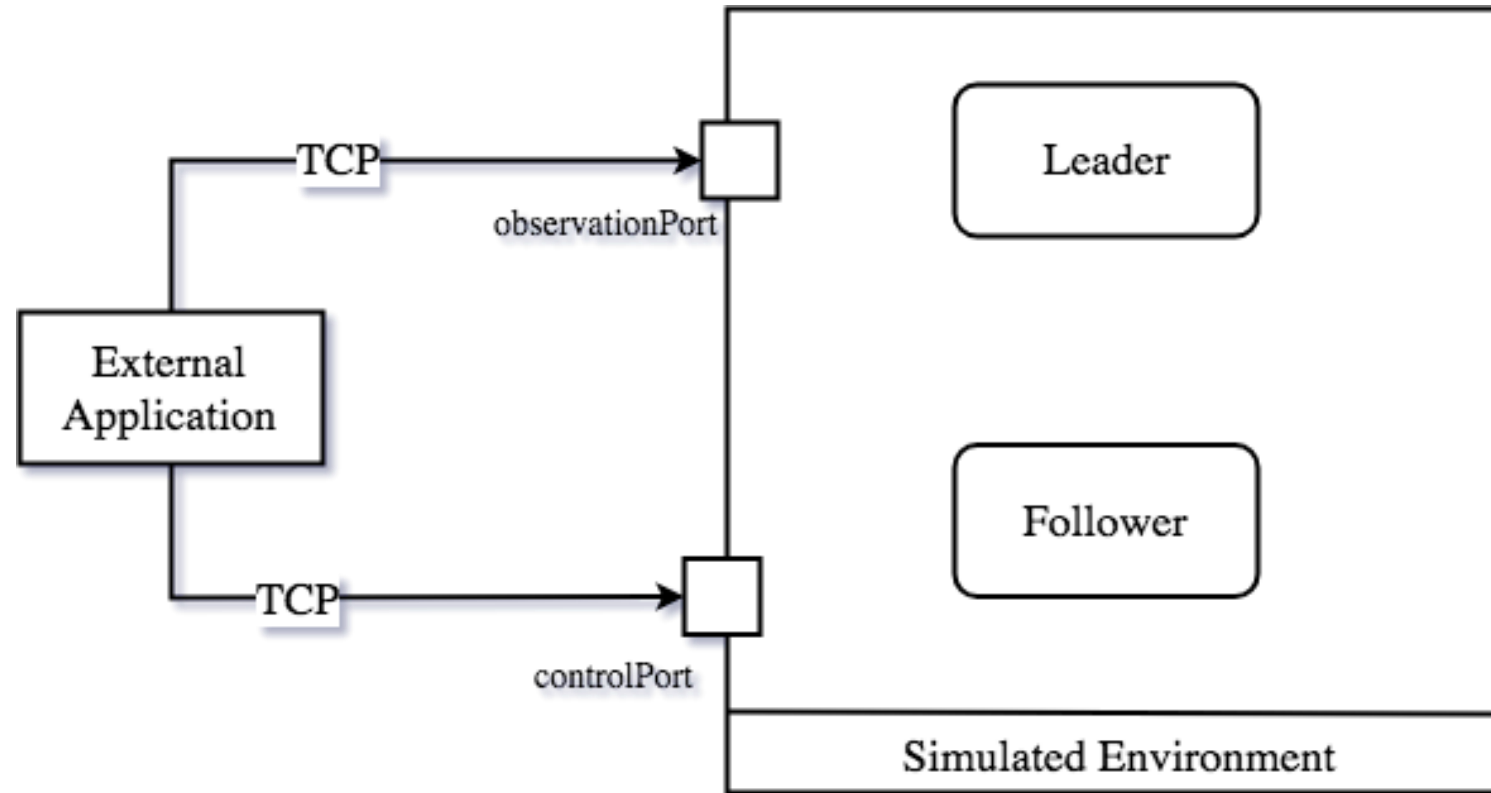


Figure from MDETool Challenge 2018 Website

MDETools Challenge

Control Commands

Message Format	Return Message	Description
"Rover,setForwardPower(<Int>)"	None	Set the power applied to all wheels as a percentage of max power (-100 to 100)
"Rover,incrementPower(<Int>)"	None	Increment the power applied to all wheels as a percentage of max power (-100 to 100)
"Rover,setLRPower(<Int>,<Int>)"	None	Set the power of the left and right wheels as percentages of max power (-100 to 100). First is for left side and the second for right side
"Rover,brake(<Int>)"	None	Apply the amount of brake power to all wheels as a percentage of max brake force (0-100)
"Rover,GPS()"	"Rover,<posx>,<posz>,"	Returns the x and z coordinates of the follower as a Real number
"Rover,getCompass()"	"Rover,<Real>,"	Returns the degrees clockwise from North as a Real number

Observation Commands

Message Format	Return Message	Description
"Leader,GPS()"	"Leader,<posx>,<posz>,"	Returns the x and z coordinates of the leader as Real numbers
"Leader,Distance()"	"Leader,<dist>,"	Returns the distance between follower and leader as a Real number
"ready"	"Simulation Started!"	Indicates your program is ready, and begins the simulation

Text taken from MDETool Challenge 2018 Website