The aim of the diploma thesis was to create a vehicle for model of smart factory which is able to reach desired position. All targets were fulfilled. The vehicle was assembled from bought kit and equipped with control system Arduino with several sensors. There are sensors for following black line, sensors for detecting reached point based on detection of black or colour point. The vehicle is usable for model of smart factory with principles of Industry 4.0, which is developed at our department. These principles of Industry 4.0 are described in this thesis.

The diploma theses has usual structure. It consists of several chapters describing used methods and used components. In next chapters the Arduino board and created control algorithms are introduced. WiFi module was used for communication between the vehicle and other components of factory. The vehicle can go, stop and change its direction on the basis of instructions from second Arduino.

Finally, the work meets the Master degree requirements and therefore I recommend it for defense.

I suggest to classify this work with grade: very good.

In Liberec on: 5.6.2018

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