

Department of Manufacturing Systems and Automation

DIPLOMA THESIS EVALUATION

Author name: Kasi Viswanathan Puthucode Balakrishnan

Thesis title: Design of control system of manipulator for manufacturing

system with Industry 4.0 conception

Opponent name: Ing. Radek Votrubec, Ph.D.

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Evaluation aspects of the diploma thesis	Classification			
	Excellent	Very good	Good	Failed
Fulfillment of Thesis tasks		х		
Results elaboration			Х	
Applicability in practice		х		
Students own contribution			Х	
Conceptual approach	х			
Formal quality		х		

The aim of the diploma thesis was to design control system for robotic arm which is able to move small subjects. The robot has to be usable in our digital factory with principles of Industry 4.0. and for teaching of Arduino programming. All targets were fulfilled. The robot was equipped with new control system using Arduino board. The student has created program to direct control of servodrives using arduino libraries. The book has theoretical part with Industry 4.0. description and with the description of used electronic components. In the practical part there is a description of used kinematic equations. The robot is able to reach desired point. These equations are translated to Arduino programming language.

Presented book has an ordinary structure, but I would recommend greater separation and more detailed description of his own work The text is comprehensible with a minimum of errors

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

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

In Liberci on: 5.6.2018

Ing. Radek Votrubec Ph.D. TU Liberec