



POZNAN UNIVERSITY OF TECHNOLOGY DOCTORAL SCHOOL

The result of the mid-term assessment together with the justification Wynik oceny śródkresowej wraz z uzasadnieniem

for the period 01.10.2019 to 31.08.2021

Piotr Kicki

the Doctoral Student at PUT Doctoral School / Doktorant Szkoły Doktorskiej PP

discipline of science / dyscyplina naukowa: automation, electronics and electrical engineering /
automatyka, elektronika i elektrotechnika

The result of assessment / Wynik oceny

Positive / Pozytywna*	Negative / Negatywna*
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Justification / Uzasadnienie

The research hypothesis formulated by Mr Piotr Kicki, M.Sc. concerns the solution of the problem of navigation and motion planning in the presence of some class of geometric and differential constraints in 2D/3D task space. According to the Committee members, the research topic is well defined and covers one of the most fundamental problems in robotics. The proposed methodology takes advantage of a neural network motion planner, which generates local feasible plans in real-time based on information about the environment, the current and desired configuration of a robot. The PhD student's goal is to develop a new motion planning method that is highly efficient while weakening expectations on the accuracy of solutions and abandoning the completeness of the algorithm.

By the date of the mid-term evaluation (16.09.2021), the PhD student has completed almost 5 tasks, which according to the Individual Education Program (IEP) represent 50% of the completed doctoral work. In the report on the work carried out, the PhD student indicates slight deviations in the work plan which are minor. According to the Committee, the degree of progress of the work is adequate to the programme and schedule in the IEP provided for the first two years of education. Mr Kicki, M.Sc. has so far published one co-authored paper in journals from the JCR list and two conference papers which are in line with the assumptions in the IEP. It is noteworthy that the PhD student has published in well-known journals and participated in recognised conferences in the field.

To summarize, Mr Piotr Kicki, M.Sc. has demonstrated that he, for the most part, has completed the tasks envisaged for implementation in the IEP. Certain deviations from the assumed plan are minor and already addressed so that they should not affect the deadline for the completion of research foreseen for the beginning of the year 2023.

All members of the Committee express an unambiguously positive opinion on the activity of Mr Piotr Kicki, M.Sc.

On behalf of the Commission / Za Komisję

.....16.09.2021.....
Date

.....
Legible signature of Head of Commission

* delete as appropriate / niepotrzebne skreślić