POZNAN UNIVERSITY OF TECHNOLOGY DOCTORAL SCHOOL



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



for the period 01.10.2023 to 31.08.2025

MAREK FECHNER

the doctoral student at PUT Doctoral School / doktorant Szkoły Doktorskiej PP

discipline of science / dyscyplina naukowa: information and communication technology / informatyka techniczna i telekomunikacja

The result of assessment / Wynik oceny

Positive / Pozytywna*

Negative / Negatywna*

Justification / Uzasadnienie

The Midterm Assessment Committee has carefully reviewed the report and presentation submitted by Marek Fechner. The Committee acknowledges that the doctoral student has been systematically implementing the Individual Research Plan and has achieved progress generally in line with the planned schedule. The Doctoral Student has carried out three main research objectives (RG1–RG3). In RG1, he developed and tested a system for the analysis of chest 3D CT scans, which resulted in over 1,500 analyses conducted on data from approximately 50 patients, including the clinical and the technical evaluation. In RG2, he designed and implemented a system for generating dental diagrams using voice commands, which was tested in a clinical environment and presented at a national conference. In RG3, he initiated the development of an Al-based screening tool for Temporomandibular Disorder diagnostics, achieving promising preliminary results that have already been disseminated at an international conference. The Doctoral Student has actively published his findings, presenting at national and international conferences.

The Committee however, also notes that there have been some changes in the order of tasks compared to the original research plan, caused by participation in additional projects and opportunities. While these modifications were well justified, they slightly shifted the timeline of certain planned outputs. Furthermore, although the publications to date represent valuable dissemination of the ongoing work, their scientific impact is currently relatively modest. The Committee also noted that part of the presented work does not directly relate to the field of medical imaging. Finally, the presentation did not clearly distinguish the advancement beyond the state of the art in the literature, nor did it clarify the specific technical and algorithmic contributions (particularly those related to AI) in the ongoing and published work.

The Doctoral Student highlighted in his report the excellent collaboration with his supervisor, Prof. Paweł Śniatała. He participated in international collaboration (San Diego State University, USA), in the PhDBoost Program, and successfully completed two international research internships (UMONS, UPHF) which demonstrates his initiative and ability to engage in competitive research environments.

In summary, the Committee does not see any significant risks that would adversely affect the completion of the remaining work within the framework of Marek Fechner's doctoral studies.

The assessment was carried out on / Ocenę przeprowadzono w dniu 17.09.2025 On behalf of the Commission / Za Komisję

Legible signature of Head of Commission