

Jury Member Report – Doctor of Philosophy thesis.

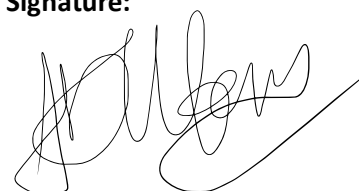
Name of Candidate: EMRE ÖZDEMİR

PhD Program: Engineering Systems

Title of Thesis: GEOSPATIAL POINT CLOUD CLASSIFICATION

Supervisor: Associate Professor Alessandro Golkar

Name of the Reviewer:

<p>I confirm the absence of any conflict of interest</p> <p>(Alternatively, Reviewer can formulate a possible conflict)</p>	<p>Signature:</p>  <p>Date: Dec 7 2021</p>
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The purpose of this report is to obtain an independent review from the members of PhD defense Jury before the thesis defense. The members of PhD defense Jury are asked to submit signed copy of the report at least 30 days prior the thesis defense. The Reviewers are asked to bring a copy of the completed report to the thesis defense and to discuss the contents of each report with each other before the thesis defense.

If the reviewers have any queries about the thesis which they wish to raise in advance, please contact the Chair of the Jury.

Reviewer's Report

Reviewers report should contain the following items:

- Brief evaluation of the thesis quality and overall structure of the dissertation.
The thesis is well written and consists of 6 Chapters on more than 200 pages (168 with text, the rest is appendices).
- The relevance of the topic of dissertation work to its actual content
The topic is very relevant to the applications in many industries. The work suggests a new approach with faster training times.
- The relevance of the methods used in the dissertation
All methods are relevant.
- The scientific significance of the results obtained and their compliance with the international level and current state of the art
The work develops and validates a new algorithm for processing point cloud data, obtained from a number of sources (lidar, photogrammetry). Validation is made using existing point

cloud datasets. State of the art is tracked vs other published algorithms and performance is compared.

- The relevance of the obtained results to applications (if applicable)
The work focuses on algorithm development and validation. No application work is done here, but it is out of scope of this thesis.
- The quality of publications
The quality of publications is consistent with requirements for the PhD program at Skoltech.

The summary of issues to be addressed before/during the thesis defense

The thesis is of very good quality and no significant issues were discovered.

Provisional Recommendation

I recommend that the candidate should defend the thesis by means of a formal thesis defense

I recommend that the candidate should defend the thesis by means of a formal thesis defense only after appropriate changes would be introduced in candidate's thesis according to the recommendations of the present report

The thesis is not acceptable and I recommend that the candidate be exempt from the formal thesis defense