Dissertation Review Form
-for members of the Dissertation Commission-

Please write a review of the dissertation taking the following criteria into account, where appropriate:

- General remarks
- The significance and status of the dissertation in the field
- The sufficiency and quality of the material
- The adequacy of the methods used
- The validity of results
- The logic of the dissertation's structure
- The knowledge and use of literature in the field
- The project's contribution to the research area
- The author's input into the achievement of the dissertation results
- Language
- The shortcomings of the manuscript

Name of the PhD Candidate : Mr Leung Tze Ming
Planned Date of Graduation : October, year: 2019

Title of the Dissertation: «Principles of comprehensive device generating urban spaces (utilizing parametric technologies)»

Would you please elaborate upon your review with reference to the above mentioned criteria in the box below. Please add extra pages if needed

- General remarks
It is important that questions related to modern tendencies in both urban design and technologies are raised and answered within scientific research Principles of comprehensive device generating urban spaces (utilizing parametric technologies) written by Leung Tze Ming. Author made a noticeable and important step in bringing inverse simulation, performance driven approach of building parametric models to urban design.

- The significance and status of the dissertation in the field
The field of Parametric Design is actively growing. While traditional approach with straightforward calculation and modelling gains its authority and new toolboxes, inverse simulation is still in its early stage of development, which pushes the significance of the dissertation even higher.

- The sufficiency and quality of the material
Author provides thorough literature review with 221 sources, which covers theory, practice and software.

- The adequacy of the methods used
The choice and usage of theoretical and mathematical models, software and programing languages fit into current research. Developed model can be further revised and extended along with future research.

- The validity of results
List of author's publications (7 publications) and his presentations at the scientific conferences confirms validity of the results.

- The logic of the dissertation's structure
The dissertation is written under clear and recognizable structure.

- The knowledge and use of literature in the field
A thorough literature review was made, covering studies in parametric urban design and related areas.

- The project's contribution to the research area
Formulation of principles in building inverse simulation parametric urban design model, which can be further expanded and applied to other fields, along with recent growth in computing power meets modern requirements for rapid prototyping and responsive interfaces.

- The author's input into the achievement of the dissertation results
Author studied the field of parametric design deeply and discovered lack of methods concerning urban design. He formulated principles of building an urban design model, driven by various performances, and tested them on a sample project.

- Language
Thesis is written in a well readable and adequate English language.

- The shortcomings of the manuscript
Literature review lacks graphic material. Chosen performances in an example proposed model are questionable. Formulated principles are not clear enough.

Name of the Dissertation Commission Member: Andrei Bolshakov

Chair / Function: Head of the Department of Architecture and Urban planning of Irkutsk National Research Technical University, Doctor of Science (Architecture), Professor

Date :

Signature  : *

** No signature required when submitted per email.*

Please send the completed form to the Head of the office of the Doctoral and Post-doctoral, Faculty Performance Evaluation Office Grigorieva O.A. e-mail:grigorieva_00@mail.ru, tel. +7 (391) 206-22-62, address: 79/10 Svobodny pr., Room P6-16, 660041 Krasnoyarsk, Russia