## Assessment of the Bachelor's Thesis

Author of thesis: Rony Eranezhath Title of thesis: Artificial Intelligence and Creativity

Assessment of the primary advisor  $\square$ 

Assessment of the opponent  $\Box$ 

Author of the assessment (first name, last name, workplace): Josef Ledvina

Evaluation of the content and final form of the thesis (A/excellent – B/very good – C/good – D/good with objections – E/satisfactory – F/unsatisfactory – not recommended for defence)

Suitability of the selected objective and work approachD
Relative completeness of the literature used for the selected topicE
Ability to critically evaluate and use professional literatureE
Logicality of the thesis structure, connection of its chaptersE
Language and stylistic level of the thesisC
Compliance with citation norms (should the text repeatedly contain adopted passages
without citing the source, the work cannot be recommended for defence)
Sufficient extent of image attachments, justifiability and suitability of attachments,
graphic layoutE
Originality of the thesis, contribution to the development of the field of study
Overall evaluation of the thesisE

Verbal evaluation of the thesis including questions that the candidate must address in his/her thesis defence:

Rony Eranezhath's thesis is an ambitious attempt to answer a general question whether "a mechanical device using artificial intelligence can create a piece of art" or, in broader terms, whether such a machine can be creative. Author largely summarizes some basic ideas about AI. Thus he mentions the concept Turing Test, distinguishes between strong and weak AI or discusses the machine learning method known as deep learning.

The exposition of the complex topics is necessarily very brief sometimes superficial, even naive. In subsection Artificial Intelligence versus Human the story of AlphaGo software beating the board game go master Lee Sedol leads author for example to the unsurprising conclusion that "this game shows that the power of machine learning systems and the speed at which these systems work are getting stronger". An opportunity to at least mention the relationship of gameplaying to the topic of human creativity is missed. Some key problems and philosophical conundrums relevant to the question posed are nevertheless touched upon. Rony Eranezhath briefly but with a degree of clarity discusses so called Argument from Consciousness raised as an objection against the idea of Turing Test and Allan Turing's behavioralist's answer to it. Latter sections on Photography and Art and especially 3D Computer Animation are unnecessary diversions from the topic of the thesis (above the basic point that the idea of technology being a threat to human creativity has a longer history). Almost completely missing is a critical discussion of some particular claims of AI having created a work of art. There has been many running around recently, AI composing Bach's fugue or creating new painting in style of Rembrandt being the most popular among them. More detailed discussion of such cases and the popular discourse surrounding them would be more productive than just summarising basic, sometimes obvious, sometimes problematic, ideas about AI.

What I do appreciate about the thesis is author's genuine need to ask some fundamental questions about the nature of creativity. That's why I propose E.

I would ask Rony Eranezhath to give one recent example of AI software producing a work of art and to demonstrate on it why it is problematic to claim that it is the AI itself that is being "creative".

Date: .....

Signature:....