



L'Aquila, 1 February 2023

To whom it may concern

Report on the PhD proposal “Automating Code-Related Tasks via Pre-trained Models of Code” by Antonio Mastropaolo

The thesis proposal concerns an interesting and relevant topic in the Software Engineering research field. Supporting the development of software systems is indeed critical, and exploiting the adoption of Deep Learning techniques to do this is of paramount importance nowadays.

The overall plan proposed by the candidate is sound to me. I've been impressed by the results already achieved by the candidate. I don't have critical comments, I'm looking forward to receiving the complete thesis document to find and go through all the details that of course, are missing in the proposal I received. The only minor comment that I currently have is about the document flow. In particular, I would improve the role of Chapter 3 with respect to Chapter 5: code summarization is already part of Chapter 3, and having Chapter 4 in the middle, which is about a completely different task, i.e., automatic logging activities, is confusing.

Apart from such a structure issue, the technical content is solid and properly experimented with different datasets; therefore, I fully support the candidate to move on with his PhD.

Please do not hesitate to contact me if you require further information.

A handwritten signature in black ink, appearing to read 'Davide Di Ruscio'.

Prof. Davide Di Ruscio

Associate Professor

Department of Information Engineering

Computer Science and Mathematics

University of L'Aquila (Italy)

e-mail: davide.diruscio@univaq.it