



## CMM

### Centre de Morphologie Mathématique

13 January 2021

Letter of reference for João P C Bertoldo

To whom it may concern,

I met M. Bertoldo in January 2020, when he enrolled in the course “deep learning for image analysis” I teach in the master’s program “Artificial Intelligence, Systems, Data,” a highly selective Parisian master’s degree. He obtained a final score of 33.5/40, ranking among the best students.

From September 2020 until now, I have been co-supervising his final year project, which should end in March. João is working on the automatic segmentation of 3D tomography images. He has already obtained excellent results from the application point of view. In the process, he has suggested several original ideas, and implemented them efficiently – he is proficient in Python. His deep learning skills are already very good, and he is also open to other disciplines. He plans, for instance, to combine deep learning with mathematical morphology to improve his current results. He has a researcher’s attitude: he aims at fully understanding what is going on, remaining critical about his work.

Last but not least, João is also motivated and enthusiastic, and his communication skills are excellent. He has a wonderful rapport with people.

In conclusion, I highly recommend M. João P C Bertoldo for a Ph.D. position in image analysis or deep learning.

A handwritten signature in blue ink, consisting of a stylized 'E' and 'D' intertwined.

Etienne Decencière  
Directeur de recherche / Research  
Director