## Cover Letter

May 30, 2022

Editor-in-Chief Dr. Xingming Sun Intelligent Automation & Soft Computing

Dear Editor,

I would like to ask you to consider the attached manuscript entitled "Classification of degenerative arthritis using Xception model in radiographic images", which is authored by Sang-min Lee and Namgi Kim for publication in your journal as a research paper.

This study presents a method for improving the accuracy of degenerative arthritis classification in radiographic images using the existing Xception model after deformation. We believe that our study makes a significant contribution to the literature because our proposed model modifies the exit flow of the existing Xception model to generate a larger number of parameters and then applies the filter of the exit flow by stacking more for effective feature extraction, which presents the possibility of further increasing accuracy through improvements in convolutional neural network models for problems with degenerative arthritis classification.

The authors declare that there is no conflict of interests regarding the publication of this paper. This manuscript is an original work on its own merit, has not been published or presented elsewhere in part or in entirety, and is not under consideration by another journal.

All the authors have approved the manuscript and agree with submission to your esteemed journal. In addition, all authors will follow the journal's APC policy. We look forward to hearing from you with regards to the status of the manuscript and welcome your esteemed comments.

Sincerely,

Sang-min Lee

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