Abstract

COVID-19, declared a global pandemic by the World Health Organization, mainly affects the pulmonary tissues, playing chest X-ray images an important role for its screening and early detection. In this work, given the low availability of images of this recent disease, we present new approaches to artificially increase the dimensionality of portable chest X-ray datasets for COVID-19 diagnosis. Despite the poor quality of the portable X-ray images, we provide an overall accuracy of 92.50% in a COVID-19 screening, proving the suitability of this proposal for COVID-19 diagnostic tasks.