Title: Recent Advance in Skin Cancer Classification through Artificial Intelligence

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Skin cancer is one of the most threatening cancers, which spreads to the other parts of the body if not caught and treated early. During the last few years, the integration of deep learning into skin cancer has been a milestone in health care, and dermoscopic images are right at the center of this revolution. This review study focuses on the state-of-the-art automatic diagnosis of skin cancer from dermoscopic images based on deep learning. This work thoroughly explores the existing deep learning and its application in diagnosing dermoscopic images. This study aims to present and summarize the latest methodology in melanoma classification and the techniques to improve this. We discuss advancements in deep learning-based solutions to diagnose skin cancer, along with some challenges and future opportunities to strengthen these automatic systems to support dermatologists and enhance their ability to diagnose skin cancer.

Biography

Paolo Sommella was born in Salerno, Italy, in 1979. He received the M.S. degree in Electronic Engineering and Ph. D degree in Information Engineering from the University of Salerno, Italy, in 2004 and 2008, respectively. He was founder and CEO of E-Health start-up company. In 2015 he joined the Department of Industrial Engineering (DIIn) of the University of Salerno, where he is actually Associate Professor of Electrical and Electronic Measurements. His main interests the development of biomedical image processing techniques, measurement in software engineering, and instrument fault detection and isolation. Co-author of two national patents and more than 100 publications in international journals and conferences.