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A Framework for Precise Nerve Segmentation in Medical Imaging

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Abstract: *Today medical field has provided us enormous facilities that has been never thought before. There has been done many improvements in the field of surgery, medicine, X-Rays and many more. But some areas still want some improvements so that patients don't need to face any type of difficulty or pain. This paper is trying to highlight the difficulties and in the treatments that are based on the ultrasound images. So in paper this our main focus is to improve the treatments based on ultrasound scans which is used widely in medical field due to vast area of application and cost effectiveness. These ultrasound scans are very important to detect any kind of injury of disease in human body because it used to scan the internal tissues of the body. One major disadvantage of these images is that they include huge amount of noise so doctors face difficulty in finding the exact location of the nerve where they have to inject the medicine to operate. These pictures are not clear enough to find the neve at once so they have to inject needle very times. With this application they can find the nerve very easily because it includes the segmentation of these nerves in ultrasound images. This application is further extended to train the system with this data so that it can be used worldwide.*

Keywords: Machine learning, Quantum algorithms, Supervised learning, Regression, Neural networks

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