



# AIUB DSpace Publication Details

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### Abstract:

In this paper, IoT based smart biofloc system has been designed. The paper has contented the concept of modern science and technology that makes the conventional biofloc system more reliable with great comfort and ease. To make an important change to measure weight of the fish in the conventional system to enrich it with smart technology is the main motive of this paper. In this paper, underwater weight measurement of fishes showed through Image Processing technology via MATLAB software where the weight measurement process can provide an overview of the growth of fish in the biofloc tank. Also, in this paper water quality is measured using different sensors such as pH sensor, TDS sensor, Temperature sensor, etc. of the fish tank and showed these results using IoT platform through smartphone display. Recirculation Aquaculture System (RAS) and renewable source (Solar) as a backup power unit are implemented in this scheme. Moreover, all the different working parts of the paper are coupled together to get a smart scheme for the biofloc fish farming system which will provide a cost-efficient, reliable, and torchbearer for the future development of the system.