Artificial Intelligence use cases in Aquaculture Fisheries Engineering

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Abstract
This Conference reviews smart fish farming systems that demonstrate how complex science and technology can be made easy for application in seafood production systems. In this context, the focus of this Conference is on the use of artificial intelligence (AI) in fish culture. It aims to protect fish farms from sudden shortages by early detection of fish diseases and monitoring and analyzing fish movement in the ponds. This review explores the techniques and implementation of technologies needed to develop intelligent computer management systems to improve commercial aquaculture production. Current artificial intelligence systems provide methodology for implementing intuitive and inferential management systems. Obtaining more information about the behavior of their fish and moving towards making data-driven decisions to further improve feeding schedules. AI, fisheries sector can develop rapidly, and production can be quadrupled within a short period as it makes aquaculture a less labor-intensive field. can even be used in conserving endangered species of aquatic life forms. Helps greatly in preventing IUU fishing. In aquaculture, wastage of inputs can be managed through AI and cost can be reduced up to 30%. Thus, AI provides complete control over the fish producing systems with less maintenance and reduced input cost.

Keywords: Artificial intelligence, fisheries health, Sustainable aquaculture, Aquaculture Fisheries Engineering