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(57) Abstract :

The present invention relates to a mobile app that uses machine learning and computer vision to help fishermen identify fish species. The present invention discloses the AI powered mobile application for fish species identification comprising; a pre-trained deep learning model for fish identification, a custom dataset; integrated features for fishermen; and technological components. It leverages a custom dataset of fish from the Indian subcontinent and a MobileNetV2-based model to analyse images captured on mobile devices. The app provides species names, nutritional details, and tracks past catches. It also integrates environmental data like temperature and humidity to improve fishing insights. Aimed at promoting sustainable fishing, it supports marine resource management and has applications in fisheries, aquaculture, research, and tourism.

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