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Deep Sea Fisherman's App using WWSN

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Abstract: *In this study, we present a method for recognizing daily living activities using Doppler sensors with extended detection ranges, addressing key challenges in cost, accuracy, user convenience, and privacy preservation. We highlight the importance of accurate and affordable activity recognition for enabling advanced services in energy-saving home appliance control and other daily life applications. The proposed method leverages Doppler sensors' capabilities to detect dynamic objects and achieve precise recognition of a wide range of activities, including location-independent tasks like reading. Our evaluation includes optimizing recognition accuracy through logistic regression and assessing ensemble methods to enhance performance. Additionally, we explore the impact of sensor reduction strategies on recognition accuracy, demonstrating the potential of this approach to streamline sensor deployment while maintaining effectiveness. This research contributes to advancing sensor-based technologies for improving everyday life services, emphasizing practical solutions that prioritize cost-effectiveness and user experience*

Keywords: Sensor Module, Transmitter Module, Receiver Module, Controller Module

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