

# **Modelling and Control of a Water-based System of Multiple Mobile Robots for Unmanned Rescue**

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## **ABSTRACT**

With the technique from applied engineering and the advent of wireless communication, the nature of rescuing the victims has changed in developing countries where major means of transportation and communication are through rivers using marine vessels/crafts. This paper presents the modelling and control of a water-based system of Multiple Mobile Robots (MMR) for unmanned rescue based on laser optics. The major components of the system prototype are shown unit-wise in a framework. The move-ability and inter-relationships of the MMR are examined along with the use of electronic devices/components described. Performance of the system is discussed, and comparative assessments of the proposed system with other systems are presented in this paper.

**Keywords:** Laser diode, Mobile Robots, Modelling, Control