

Bio-inspired Wire-Driven Fishlike Underwater Robot

Fishlike underwater robot, or simply robot fish, is a topic that has attracted much interest in the recent decade. Fish swimming is a wonder of nature: elegant, fast, agile, and highly efficient. Compared to conventional screw propelled ship, fish is several times more efficient, which motivates scientists and engineers to design and built robot fish for various applications, such as underwater exploration, pollution monitoring and shipping. This presentation introduces our bio-inspired wire-driven fishlike underwater robot, covering the design, modeling and optimization, control and experimentation. The presentation will help scientists and engineers to understand the exciting robot fish research and development from theory to practice.