J Comput Sci Syst Biol 2018, Volume 11
DOI: 10.4172/0974-7230-C1-018

A survey of simulation tools for underwater wireless sensor networks

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The oceans cover about 71% of the earth's surface and contain about 97% of the earth's water. Autonomous Underwater Vehicles (AUVs) and Unmanned Autonomous Vehicles (UAVs) are equipped with underwater sensors to explore natural oceanic habitats and gather scientific data for monitoring applications. The objective of this survey paper is to study the key features and limitations of existing simulation tools for Underwater Wireless Sensor Networks (UWSN) in detail. The study focuses on the unique characteristic of the simulation tool, developers of the simulation tools and the appropriate applications for which the simulation tools can be used. The study concludes with a comparison of UWSN simulation tool parameters such as specification, language, energy efficiency, application to heterogeneous networks, ease of use, software, hardware and options for open source availability. This survey paper intends to help researchers select the right simulation tools based on their research applications.

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