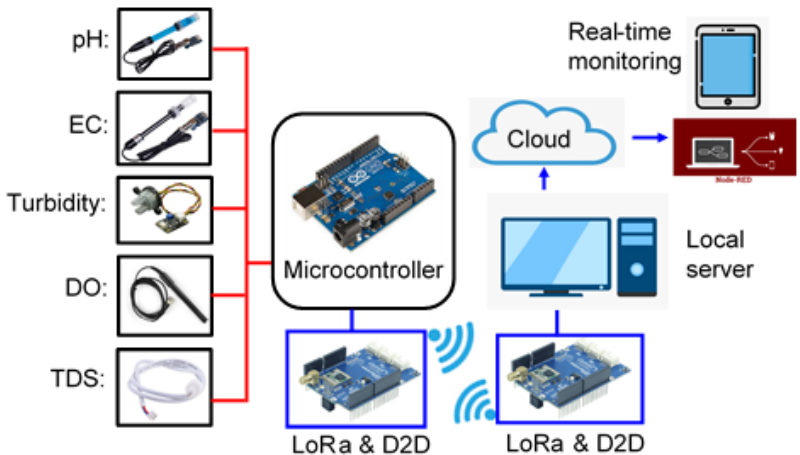


Climate change exacerbates river water quality degradation through increased temperatures, altered rainfall patterns, and extreme weather events, leading to higher pollutant loads and reduced water availability. This necessitates more energy-intensive water treatment processes, significantly increasing the carbon footprint of public water supply systems. Hence, effective water quality monitoring systems are indispensable for safeguarding public health, supporting sustainable water management, and protecting aquatic ecosystems. This project is focused on the calibration process to correct systematic errors in IoT water quality sensors, embedding the machine learning technique to learn and adjust the measurements to non-linear patterns. Using the machine learning calibrated sensors, proper monitoring and control of water quality can be employed to gain insights into the water quality of the Mekong River and assess its impact on the sustainability of the river under climate change.



Water quality IoT system

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