AcquaNetwork: Measurement and Analysis System For Residential Water Consumption

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The water wasting is a worldwide problem and, specifically in Brazil, it reachs 166,3 liters a person per day, while recommendation of the United Nations Organization is about 110 liters a person per day. This demonstrate the overconsumption in Brazil is about 51%. 5 of 10 watersheds that supply the human use in the world presents consumption above the ideal. We created AcquaNetwork - a measurement and analysis system for residential water consumption - based on this fact, working as a measurement tool and warning the people showing them their detailed water consumption. We designed the devices as tiny as possible in order to be installed on each water dispenser point in a home. The system measures the amount of water spent in each point and log the data in a cloud based system, where they are analyzed and showed with detailed and customized graphics in a website. Accessing the website, the user can check the water consumption in a customized period, either by equipment or by place and getting also consumption tips and actions that can be done in order to save water at home. The devices, cloud structure and complete network system are performing well even being in prototype stage, showing accurate figures and a relevant contribution to decrease the water spending. Certainly,AcquaNetwork is a typical IoT system and presents great potential to create a new conscience about the world’s water waste, saving the watersheds and water bills.

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