



- 3) The Smart Protector will first alert the occupants of a leak via wireless communication and request a shutoff command. In case of severe water leak events, the Smart Protector may shut off the water immediately at the same time of sending the notification.
- 4) The Smart Protector may harvest energy from the water flow itself during normal operation and recharge the battery so no battery replacement or messy power wires are needed.

The project involves sensors, actuators, AI, computer programming, energy harvesting, and WiFi communication. It is likely lead to the commercialization of the product concept. Funding will be provided for component purchases and prototyping.

