

**RERC-ACT R4 Project:
Batteryless MicroPower Sensors for Context Aware Technologies**

We are part of an exciting multi-disciplinary team dedicated to the development of maintenance free wireless sensors as an enable for brining the tremendous benefits of advanced wireless technologies to those with cognitive disabilities. By applying our award winning technologies for efficient and safe harvesting of microwave energy, many wireless devices can be adapted so that they do not require user intervention for battery replacement, battery charging or device configuration. The result is that many of the practical barriers are removed for wide spread use of devices such as health monitoring sensors, medicine dispensers, speech, communications and personal assistants by those with cognitive or physical disabilities.

In this poster we present our latest results. Our system is a wireless, maintenance-free health monitoring sensor. The unit performs temperature; galvanic skin response (related to subject stress level) and 3-axis motion sensing and transmits data to a wireless receiver once every 5 seconds. The unit is powered via microwave energy from a nearby transmitter.

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