

Rohan Menon

he/him • www.rohanmenon.com • rohan@rohanmenon.com

An engineering student with a focus on embedded devices, sensors, and wireless technologies who thrives in fast-paced, collaborative environments.

Experience

Research Assistant

Feb 2022 - Present

UW Sensor Systems Laboratory

WISP - a family of batteryless sensors that are powered by and communicate entirely through UHF RFID power harvesting and backscatter.

- Developed hardware and embedded firmware for a new generation of WISP sensors and a companion desktop application.
- **R. Menon**, R. Gujarathi, A. Saffari, J. Smith, "[Wireless Identification and Sensing Platform Version 6.0](#)", EnsSys 2022

Deep Contact Graph Routing - a collaboration with Astrobotic, developing new routing protocols for the Moon, funded by a NASA ESI grant.

- Created framework for simulating routing protocols with RF aware mobile agents.
- D. Ta, **R. Menon**, J. Taggart, A. Tettamanti, S. Feaser, P. Torrado, J. Smith, "Roaming DTN: Integrating Unscheduled Nodes into Contact Plan Based DTN Networks", CCAA 2023

Projects

Resonant

Nov 2020 - Jun 2021

A system to localize and identify ambient noises and present them to a user through a wearable display.

- Developed a 3D sound localization algorithm using a microphone array with phase shift estimation and created a heads-up display to communicate this information to a user

Aquametric

Oct 2018 - Dec 2020

Ultra low power, cellular-based, stream and river monitoring devices with a battery life of up to one year in the field.

- Won the Hackaday Bootstrap Award and was a finalist for the Hackaday Prize 2020, an international competition for open-source hardware and software
- Worked with low-power hardware and firmware, LoRa and cellular communication, and ultrasonic/LiDAR ranging technologies

Skills

Hardware

- PCB Design
- Cellular, LoRa, RFID communication
- Low power sensing systems

Software

- Python, Node
- Frontend dev (React, Next, web design)
- Firmware (Embedded C/C++, Rust)