UNIVERSITY OF TRENTO - Italy
Department of Industrial Engineering

Doctoral School in Materials, Mechatronics and Systems Engineering

BIMONTHLY REPORT. *Send to: dii.phd@unitn.it*

Deadlines: 22.02, 22.04, 22.06, 22.08, 22.10, 20.12 (every year)

Student Name: **Jordan Blake** Cycle/Year: **XXX**
Thesis: **Adaptive Scheduling for Small Sensor Networks**
Supervisor: **Dr. Lina Okafor** Date: **August 29, 2026**

Summary of Research Activity:

- Designed a repeatable simulation of adaptive duty cycling for a battery-powered sensor network.
- Compared energy use and message latency under three scheduling rules.
- Prepared a small open data set and documented the analysis workflow.

Attendance at Schools/Classes/Seminars (title, length (day/hours), credits):

- *Research methods workshop*, 2 days (6 credits)
- *Embedded systems seminar*, 8 hours (2 credits)
- *Doctoral writing retreat*, 3 days (4 credits)

Publications/Congress participation:

- Blake, J. and Okafor, L.:
  Adaptive scheduling under intermittent power
  manuscript in preparation
- Blake, J.:
  Poster: Measuring duty-cycle trade-offs
  Northbridge Systems Symposium, 2026