Pervasive Computing Assignment 1 - LoRa Based Plant Monitoring

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Abstract

Write Abstract here.

1 Introduction

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2 Report Questions

? Why do you choose each sensor? ? What is your sampling/communication interval and why? ? What is the measured packet reception rate? ? Can you make a power consumption model based on the LoPy data sheet and your implementation? ? Verify your model by measuring power consumption physically. ? What battery would you need to run your node autonomous for one month? Could you use some energy harvesting technique to achieve a longer lifetime? If yes, what would you choose? ? What could be done to improve battery life?

2.1 Question 1

? Why do you choose each sensor?

2.2 Question 2

? What is your sampling/communication interval and why?

2.3 Question 3

? What is the measured packet reception rate?

2.4 Question 4

? Can you make a power consumption model based on the LoPy data sheet and your implementation?

2.5 Question 5

? Verify your model by measuring power consumption physically.

2.6 Question 6

? What battery would you need to run your node autonomous for one month?

2.6.1 Energy harvesting

Could you use some energy harvesting technique to achieve a longer lifetime? If yes, what would you choose?

2.7 Question 7

? What could be done to improve battery life?

3 Conclusions

SenSys'13, November 11–15, 2013, Rome, Italy.