

August 2018 Progress Report

By

Mary Nsabagwa

Outline

- Objectives
- August Progress
- September Plans

Working Title

Towards a Robust Wireless Sensor
Network-based Automatic Weather
Station

Main Objective

To design mechanisms to improve robustness of WSN-based AWSs

Specific Objectives

- To investigate the status of weather stations in order to establish challenges affecting their operations and identify opportunities for improving the sustainability of Automatic Weather Stations (AWSs)
- To propose robust optimization techniques for WSN-based AWSs design to address challenges identified
- To propose Quality of Service assessment techniques for the AWS to assess the robustness and performance of the WSN-based AWS

September Achievements

- **Condition Monitoring of Automatic Weather Stations Based on Wireless Sensor Networks paper**
 - Incorporating feedback from Bjorn -- **Done**
 - Submit paper: Journal of sensors and actuator networks- **Rejected**
 - Resubmitted to : Journal: Internet of Things
- Compile Content for self-healing (2nd objective)
 - Fault detection using Analytical redundancy
- Start thesis and **share draft chapter 1 with advisors**
- Participate in the deployment of gen 3 AWS - Entebbe, Buku
- PhD core course , starting 3rd September 2018 - **Not invited**

October Plans

- Thesis Introduction
- An Autonomic Wireless Sensor Network Application Design for Weather Monitoring

THANK YOU