

# Projects

## Event monitoring system

This is an intelligent video surveillance system that uses a raspberry pi and its camera to monitor and store events of a place in real time and be able to perform face recognition of the people entering and exiting a gateway.

## Genset Project

This is a fleet management system that transmits data in real-time from a set of industrial vehicles that transport perishable goods to a central system providing monitoring of these vehicles in real-time in terms of fuel consumption, driver behavior among other parameters.

# Research

## LoRa

LoRa Technology offers a very compelling mix of long range, low power consumption and secure data transmission. LoRa mainly targeted for Machine 2 Machine and IoT networks.

Our contribution is designing and implementing LoRa to interconnect IoT devices to create agricultural, industrial and commercial solutions while reducing the limitations from other wireless technologies such as power and other overheads.

## Network monitoring system

This research is in collaboration with the East Carolina University (ECU), aims at improving network troubleshooting using runtime SDN (software-defined networking) knowledge to perform localization of network issues.

Our contribution involves improving SDN-RADAR2 algorithm, which uses packet loss and traffic load metrics, and visualization of the live network performance, through deploying it to the university network using system-on-chip modules such as the BeagleBone Black and Raspberry Pi.

# Training

1. Motorola Industrial IoT training
2. Cisco fundamentals in IoT
3. IoT Security using Python
4. 3D printing by Kuunda 3D



**Strathmore**  
UNIVERSITY





## WHO WE ARE

We are Research and development center which focuses on innovations in IoT space



## WHAT WE DO

We deliver robust and sustainable solutions in all sectors of the economy



## WHY IT MATTERS

Internet of Things is the future of technology that can make our lives more efficient



## CONTACT



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## Internet of Things Research Lab

