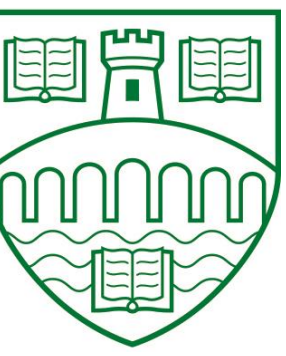


A Scalable, OSS based IoT Framework

Sivakumaran S
MSc in Big Data

UNIVERSITY of
STIRLING



The project aims to obtain, stream, process and visualise real time data (Weather) along with NoSQL storage. The project makes use of open standards and software. All components are modular and are replaceable with equivalent components

The IoT stack is capable of:

- Scalability from one node to a cloud cluster
- Integral graph traversal algorithms
- Machine learning
- Distributed logging
- Distributed database storage
- Line Graph and cloud-based GIS visualisation
- Handling diverse data

All components (except the GIS visualisation) are completely open source software: *free for modification and use*

Installable components (Kafka, Spark, Cassandra) are cluster and DC/Rack aware server software providing scalability, resilience and redundancy

