Research Report Template

|  |  |
| --- | --- |
| Date | Change log |
| Nov 16 2020 | * Format to fit RProjC report format |
|  |  |
|  |  |
|  |  |
|  |  |

Title: \*Distributed Clustering Protocol for Vehicular Networks

Author: Elizabeth Ondula

Mentor: Hang

Context: Vehicular Ad-hoc Networks, Road Safety

**1. INTRODUCTON**

* **Problem**

Hang et al DSRC/802.11 vehicle communication technologies cannot handle big data rates (about 2.2 Gbps). These technologies can only do 3-27Mbps theoretically.

* **Scenario**
* **Goal**

**2. RELATED WORKS**

1. Clustering protocols vs Clustering Algorithms
2. Wireless Networks Channel Interference
3. VANETs vs MANETS vs Autonomous Vehicles
4. Driving education

**3. RESEARCH GOALS:**

* Problems and Challenges
* Idea Formulation (Clustering)
* Questions

**4. DISCUSSION**

* **Research Approach**
* **Data Collection:**
  + Tools used
    - CARLA
    - AutoCast
    - MQTT
* **Experiment**:
  + Environment (Remote CARLA)
  + Simulator
  + Clustering module
  + **Clustering Protocol**
  + Results
  + Analysis

**5. FUTURE WORK**