***Honours project interim report***

**What is swarm robotics?**

**What are collaborative and cooperative swarms?**

**What is my project?**

For my Honours project I have decided to create a robot controller for a swarm of robots that will collaboratively complete an assigned task such as moving a box from point A to point B.

**Why use and EA and NN? (other options considered)**

The three options I considered for completing this project are:

* One central script control and keep track of the robots
* Finite state machine controlled by a neural network
* Neural network controller trained by an evolutionary algorithm

**What have I done so far?**

In my project so far I have learned how to use the WeBots simulation software, write controllers for robots in Python, how to write an evolutionary algorithm and how to build neural networks using the numpy library in Python.

**What am I planning on doing and how?**