Progress Report : Masters Computer Science

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During this semester, I have progressed with the creation of the prototype which will serve to support the model for my research.

This has included the following:

- Paper submission for model only to IST Africa. This paper was not accepted, however, completing a submission resulted in the conceptual model being built as well as valuable feedback being received from IST Africa.
- 2. A basic flow of the model built using classic Akka actors.
- 3. Researching Akka Typed.
- 4. Rewriting the basic prototype in Akka Typed.
- 5. Research into expanding the basic prototype into a distributed, scalable system.
- 6. Analysis of phase transition for particle swarm optimisation, this will be a method of consideration of initialisation of nodes in a SOM.
- 7. Measures for troubleshooting have been implemented, I have implemented logging in the prototype system.
- 8. Investigation into KAMON metrics for akka. Kamon-apm is now able to serve some metric data for the prototype. More customisation of data metrics needs to be put into place.