Special Session Title: Immunological Computation – a nature and biologically inspired computing paradigm

Aims, Scope, and List of Topics:

Immunological Computation is a branch of biologically inspired computational intelligence techniques derived from models of vertebrate adaptive immunity. Immunological Computation has progressed rapidly over the last few decades and has been applied to the generation of solutions for a wide range of problems. The vertebrate immune system serves as a useful unifying metaphor for expressing solutions to a wide range of problems to which other computational intelligence paradigms may not be directly suited.

This session will focus on innovative extensions to immunological computational models and the application of those models to solving real world problems. Researchers are invited to submit high quality papers detailing novel applications within the field of Immunological Computation.

Although not limited to the following this session concerns itself with the following topics:

1. Theory of Immunological Computation.
2. Hybridization of Immunological Computational and other computational intelligence paradigms.
3. Immunological Computation and Cyber Security.
4. Realizing multi-agent systems utilizing Immunological Computational concepts.
5. Innovative applications of Immunological Computation

Organizers

E. M. Ehlers, Academy of Computer Science and Software Engineering, University of Johannesburg
emehlers@uj.ac.za
D. A. Coulter, Academy of Computer Science and Software Engineering, University of Johannesburg
dcoulter@uj.ac.za