

Privacy-Preserving AIS for Network Security

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- Variation of ARTIS[1]
- Graph consists of single node
- Detectors and antigens consist of binary strings
- Antigen: Encoding of incoming connection

- Broadly consists of the following steps:
 - Generate random set of detectors
 - Tolerization: Replace those detectors that are affine to self strings
 - Collectively classify incoming connections to network using the detectors
 - If detectors are activated (exceed threshold), commit to memory

Next Steps



Steven A Hofmeyr and Stephanie Forrest.

Architecture for an artificial immune system.

Evolutionary computation, 8(4):443–473, 2000.