Abstract

Intrusion Detection System is a security support mechanism which has received great attention from researchers all over the globe recently. In the recent past, bio-inspired meta-heuristic technique such as swarm intelligence is being proposed for intrusion detection. Swarm Intelligence approaches are used to solve complicated problems by multiple simple agents without centralized control. The swarm intelligence algorithms inspired by animal behaviour in nature such as ants finding shortest path in finding food; a flock of birds flies or a school of fish swims in unison, changing directions in an instant without colliding with each other has been successfully applied to optimization, robotics and military applications. But however, its application to the intrusion detection domain is limited but interesting and inspiring. This paper provides an overview of the research progress in swarm intelligence techniques to the problem of intrusion detection.

References


Complex adaptive systems, MIT Press

C. Grosan et al. : Swarm Intelligence in Data Mining, Studies in Computational
A Study on Swarm Intelligence Techniques in Intrusion Detection

Intelligence (SCI) 34, 1–20 (2006), Springer-Verlag.
A Study on Swarm Intelligence Techniques in Intrusion Detection

Conference, vol. 2 (pp. 399–403).

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