Computación y Sistemas
ISSN: 1405-5546
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On Modelling an Immune System
Computación y Sistemas, vol. 7, núm. 4, abril-junio, 2004, pp. 249-259
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Abstract

Immune systems of live forms have been an abundant source of inspiration to contemporary computer scientists. Problem solving strategies, stemming from known immune system phenomena, have been successfully applied to challenging problems of modern computing. However, research in artificial immune systems has overlooked establishing a coherent model of known immune system behaviour. This paper aims reports on an preliminary computer model of an immune system, where each immune system component is specified in terms of its observable behaviour using a suitable process algebra. Our model is not only suitable to simulation but also and more importantly to formal analyzes of immune system behaviour.

Keywords

Multiagent systems and Distributed AI, Immunology, Immune Based Computer Systems.