
Editorial

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Biographical notes: Lakhmi C. Jain is a Professor and Director/Founder of the Knowledge-Based Intelligent Engineering Systems (KES) Centre, located in the University of South Australia. His interests focus on the artificial intelligence paradigms and their applications in complex systems, art-science fusion, e-education, e-healthcare, unmanned air vehicles, defence systems and intelligent agents.

Before joining CQU in 2007 to lead their research activity in games development, Jarvis worked for CSIRO Manufacturing and Materials Technology for 15 years and then for a software company, Agent Oriented Software (AOS) for six years. At AOS, he developed agent-based applications for the defence, manufacturing and business sectors and conducted commissioned research for the UK Ministry of Defence, Australia's Defence Science and Technology Organisation (DSTO) and the US Air Force. The research activities were concerned primarily with the modelling of realistic individual (soldier, pilot, unmanned air vehicles) and team (platoon, company, air combat) behaviour using intelligent agents. These agents were then used to evaluate tactics in either closed simulations or in wargaming environments.

Jadranka Sunde is a Head of Threat Mitigation Group in Weapons Systems Division, Defence Science and Technology Division (DSTO), located in the Edinburgh, South Australia. Her first appointment in DSTO, was in Communication Division, where she worked on simulation and modelling of HF communication networks and was also a Task Manger for High Frequency Modernisation project. Her next appointment was in Land Operations Division

where her main contribution was to Biometrics project. Under her leadership this project produced world leading methodology for operational evaluation of biometrics systems and produced number of postgraduate degrees and also real, implemented and optimised face recognition project. In October 2004 she moved to her current position where she was given a role to establish a new research program in Threat Mitigation from Improvised Explosive Devices, both in National Security and Defence area.

The aim of this journal is to provide a forum for stakeholders in defence support systems – users, developers, and researchers. As such, it is our intent to solicit contributions from all three groups, as it is our belief that each provides a unique perspective that the others need to be aware of. Consequently, in addition to conventional research papers with either a strong defence focus or of a general nature, but with direct relevance to the defence domain, we are also seeking papers that address the development, commissioning and deployment of innovative systems and papers that address the concerns of the users of defence support systems. This diversity is reflected in our first issue, with papers addressing research issues (papers 1 and 4), system development (paper 2) and user concerns (paper 3). It is our intent that this diversity will continue, although we will produce special issues addressing specific topics of interest on a regular basis.

The scope of defence support systems is vast, and is again reflected in the contributions in this issue. Our mission is to facilitate the continuing development of innovative intelligent defence support systems. This requires us to showcase intelligent technologies (such as paper 4), applications that employ intelligent technologies (such as paper 1) and areas where intelligent technologies are not currently employed, but are candidates for future exploitation (as in paper 3).