Introduction

The most recent *Performance Metrics for Intelligent Systems* (PerMIS) Workshop was held August 24–26, 2004 in Gaithersburg, Maryland, USA. This workshop was co-sponsored by the National Institute of Standards and Technology, the Defense Advanced Research Projects Agency, and the Institute of Electrical and Electronics Engineers (IEEE) Systems, Man, and Cybernetics Society, and held in cooperation with the IEEE Computational Intelligence Society. The 2004 event was the fifth in a series of annual meetings that bring together a multi-disciplinary group of participants from industry, academia, and government agencies to share research results and help define requirements for measuring the performance of intelligent systems is a variety of application domains. There has been steady progress in the field since the inception of the PerMIS series, evidenced by an increasing number of submissions that present experimental results, rather than just theoretical concepts for measuring the intelligence of systems.

Invitations to submit substantially extended and updated manuscripts for possible publication in the special issue of the journal were sent to authors of the seventeen papers that were deemed most innovative and relevant to the scope of this journal. The authors were instructed to extend their PerMIS papers in a significant and substantive way in order to be considered for publication. The extended submissions were then rigorously reviewed by at least three reviewers and only those that met the journal's high standards were selected for inclusion in this issue. The papers published in this special issue represent important contributions to various elements within the field of performance evaluation of intelligent systems.

Elena R. Messina
Guest Editor