Introduction

In November 2012, the eleventh Workshop on Distributed Autonomous Robotic Systems (DARS 2012) was held in Baltimore, Maryland on the campus of Johns Hopkins University. Previous DARS workshops were held in 1992, 1994, and 1996 in Riken, Wako, Japan; Karlsruhe, Germany (1998); Knoxville, Tennessee, USA (2000); Fukuoka, Japan (2002); Toulouse, France (2004); Minneapolis, Minnesota, USA (2006); Tsukuba, Ibaraki, Japan (2008); and Lausanne, Switzerland (2010).

DARS 2012 was organized by M. Ani Hsieh (Drexel University) and myself, and the conference proceedings are being published by Springer. We received over 70 submissions for DARS, 31 of which were accepted for presentation and publication in the conference proceedings. This special of Robotica consists of a select subset of papers from DARS 2012 which have been expanded into journal form. Topics range from distributed swarms of mobile robots to modular reconfigurable robotics. The papers in this special issue emphasize hardware implementations and new algorithms for coordination and control of these systems, as well as enabling technologies for distributed autonomous robotic systems.

DARS 2012 would not have been the success that it was if not for the organizational efforts of M. Ani Hsieh and M. Kendal Ackerman, and the overall leadership of Hajime Asama. DARS 2014 is being held in November 2014 in Daejeon Convention Center, Daejeon, Korea.

Gregory Chirikjian Editor Robotica