# WIRELESS SENSOR AND ACTOR NETWORKS

#### IFIP - The International Federation for Information Processing

IFIP was founded in 1960 under the auspices of UNESCO, following the First World Computer Congress held in Paris the previous year. An umbrella organization for societies working in information processing, IFIP's aim is two-fold: to support information processing within its member countries and to encourage technology transfer to developing nations. As its mission statement clearly states,

IFIP's mission is to be the leading, truly international, apolitical organization which encourages and assists in the development, exploitation and application of information technology for the benefit of all people.

IFIP is a non-profitmaking organization, run almost solely by 2500 volunteers. It operates through a number of technical committees, which organize events and publications. IFIP's events range from an international congress to local seminars, but the most important are:

- The IFIP World Computer Congress, held every second year;
- Open conferences:
- · Working conferences.

The flagship event is the IFIP World Computer Congress, at which both invited and contributed papers are presented. Contributed papers are rigorously refereed and the rejection rate is high.

As with the Congress, participation in the open conferences is open to all and papers may be invited or submitted. Again, submitted papers are stringently refereed.

The working conferences are structured differently. They are usually run by a working group and attendance is small and by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is less rigorous and papers are subjected to extensive group discussion.

Publications arising from IFIP events vary. The papers presented at the IFIP World Computer Congress and at open conferences are published as conference proceedings, while the results of the working conferences are often published as collections of selected and edited papers.

Any national society whose primary activity is in information may apply to become a full member of IFIP, although full membership is restricted to one society per country. Full members are entitled to vote at the annual General Assembly, National societies preferring a less committed involvement may apply for associate or corresponding membership. Associate members enjoy the same benefits as full members, but without voting rights. Corresponding members are not represented in IFIP bodies. Affiliated membership is open to non-national societies, and individual and honorary membership schemes are also offered.

# WIRELESS SENSOR AND ACTOR NETWORKS

IFIP WG 6.8 First International Conference on Wireless Sensor and Actor Networks, WSAN'07, Albacete, Spain, September 24-26, 2007

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# **Preface**

The IFIP Working Group 6.8 Mobile and Wireless Communications has a long tradition on addressing and grouping researchers and practitioners working on various mobile and wireless communications technologies and services. Due to the promising and exciting applications enabled by the development of Wireless Sensor and Actor Networks (WSAN), the IFIP WG 6.8 had decided to launch a new series of conferences on this exciting new technology. The 1<sup>st</sup> WSAN was held in Albacete, Spain on September 24-26, 2006. After a thoroughly evaluation process by the program committee members assisted by external reviewers, a total of 20 papers from 9 different countries were selected to be included in the program.

The papers selected to be included in the volume illustrate the state-of-the-art and current trends in the area of wireless sensor and actor networks. The program was organized into eight topics:

- 1. Actors
- 2. Applications
- 3. Security
- 4. Energy
- 5. Quality of Service
- 6. Localization
- 7. Middleware
- 8. Protocols

We are grateful to Dan Steignart from the University of Berkeley for having accepted to deliver the opening tutorial, and Pedro Marrón from the University of Bonn, Luis Redondo from MTP and Walter Stockwell from CrossBow for having accepted to participate in the panel session. We would like to thank all the members of the Technical

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Program Committee and the additional referees. Without the support, the conference organization would not have been possible. Last but not least, we are grateful to all the authors and participants who trusted us to organize this event and to Springer's IFIP Editorial for supporting us. We expect WSAN 2007 to have been a fruitful and stimulating forum for exchanging ideas and experiences in the area of wireless sensor and actor networks.

September 2007

Luis Orozco-Barbosa Teresa Olivares Rafael Casado Aurelio Bermudez

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**EPSA** Escuela Politécnica Superior de Albacete I<sub>3</sub>A Instituto de Investigación en Informática Parque Científico y Tecnológico de Albacete **PCvTA** Universidad de Castilla-La Mancha

**UCLM** 

**JCCM** Junta de Comunidades de Castilla-La Mancha

MEC Ministerio de Educación y Ciencia

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