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Pier Luigi Mazzeo · Paolo Spagnolo
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Activity Monitoring by Multiple Distributed Sensing

Second International Workshop, AMMDS 2014
Stockholm, Sweden, August 24, 2014
Revised Selected Papers

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Preface

Nowadays different scientific research communities have oriented their efforts toward intelligent recognition of activity in distributed sensing environment.

An increasing number of algorithms and applications use a huge amount of different types of sensors, due to their relatively low cost and commercial diffusion.

A distributed sensor network includes a set of spatially scattered intelligent sensors designed to obtain measurements from the environment, to extract relevant information from the data gathered, and to infer appropriate decision from the information gained.

Distributed sensors network dimension depends on the multiple processors to simultaneously gather and process information from many different sources.

New technology availability makes these sensing networks economically feasible. The scope of this book is to investigate the problem of using distributed sensor networks to track, monitor, and understand the activity of human beings. This research field has different application areas such as human–computer interaction, user interface design, robot learning, and surveillance. At the highest decision level, the activity monitoring task addresses human behavior recognizing and intention understanding, from different observation sources. This is a very difficult task, even for humans to perform, where misinterpretations are common. This book collects different works presented at 2014 AMMDS Workshop in Stockholm. All chapters are centered on the application of distributed sensing network in the areas of human motion detection and tracking; human activity recognition; surveillance and security.

August 2014

Pier Luigi Mazzeo
Paolo Spagnolo
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