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Editor
Alessandro De Gloria
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University of Genoa
Genoa
Italy

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Preface

This is the third edition of the Appleepies proceedings published by Springer, with the conference that is ever increasing its reach and impact, also at international level. This confirms our initial intuition, that applications of electronic systems are a focal point at the intersection of technology and requirements, users and developers, business and academy.

The papers of this edition represent a mix that clearly reflects the perspectives and the potential of the field, with particular reference to the Internet of the Things (IoT). We can identify three main areas: sensors, embedded architectures, and applications.

The health domain has a great relevance, implying the development of wearable systems that monitor a person's status in a variety of activities, while both healthy or ill.

Another significant and pervasive domain is represented by intelligent transportation systems, where IoT and, more in general, electronic technologies are a major factor towards autonomous driving by significantly increasing the context awareness.

Also the methodologies and tools for embedded system development and life-cycle management are accurately covered, stressing the importance of an approach that combines the centrality of the user needs with the importance of market efficiency and effectiveness.

Achieving good cost/performance ratios requires deep knowledge both of the system's target application and domain, and of the technologies that are potentially able to fulfill the expected goals.

This calls for the importance of the role of the university as a place where teachers and students, in their different roles, work together to study, share, develop, and transmit knowledge and ideas. The business world can benefit through technology transfer and by getting valuable students, able to face the challenges of the

real world, in a variety of domains such as healthcare, transportation, agriculture, education, tourism, entertainment, cultural heritage, energy, construction, etc.

By reporting original research works and discussing several examples, this book will hopefully help the readers to get significant insights into this direction.

Genoa, Italy

Alessandro De Gloria

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