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Preface

This book is a collection of high-quality peer-reviewed research papers presented at the First International Conference on Embedded Systems and Artificial Intelligence (ESAI'19), May 02–03, 2019, held at Faculty of Sciences, Dhar El Mahraz, Sidi Mohammed Ben Abdellah University, Fez, Morocco.

Artificial intelligence (AI) has driven a revolution, not only in the domain of computer science, communications and information technology but also in diverse engineering applications. With the growing power of AI—new computing platforms—embedded systems are necessary to support the emerging AI algorithms and applications from system level to circuit level. ESAI-2019 conference promoted the transfer of recent AI research into practical applications and implementations, i.e., developing intelligent ICT systems and pursuing artificial intelligence applications for contents, platforms, networks and devices. The goal of this conference was to bring together researchers and practitioners from academia and industry to focus on understanding recent research in the said domain and establishing new collaborations in these areas.

ESAI-2019 had received a number of submissions from the field of embedded systems, artificial intelligence, intelligent computing and its prospective applications in different spheres of engineering. The papers received have undergone a rigorous peer-review process with the help of the technical program committee members of the conference from various parts of country as well as abroad. The review process has been crucial with minimum two–three reviews each along with due checks on similarity and content overlap.

The book consists of 80+ quality papers segregated into two major modules of embedded system and artificial intelligence. There were seven parallel tracks (of oral presentation sessions chaired by esteemed professors from premier institutes of the country), and they are compiled in this volume for publication. The conference featured many distinguished keynote addresses by eminent speakers from various regions across the globe like: Prof. Abdelhakim Senhaji Hafid, University of Montreal, Canada; Dr. Vikrant Bhateja, Shri Ramswaroop Memorial Group of Professional Colleges (SRMGPC), Lucknow, Uttar Pradesh, India; Prof. Jamal Zbitou, University of Hassan 1st, Morocco; Prof. Mohammad A. M. Abushariah,

King Abdullah II School of Information Technology, The University of Jordan, Jordan; Prof. Suresh Chandra Satapathy, KIIT (Deemed to be University), Bhubaneswar, Odisha, India; and Prof. Assal A. M. Alqudah, Nuance Communication Services Ireland Ltd., Dubai Branch, UAE. These keynote lectures/talks embraced a huge toll of audience including students, faculties, budding researchers as well as delegates.

The editors are thankful to Faculty of Sciences, Dhar El Mahraz, Sidi Mohammed Ben Abdellah University, Fez, Morocco, for their whole-hearted support in organizing the ESAI conference. The editorial board takes this opportunity to thank authors of all the submitted papers for their hard work, adherence to the deadlines and patience during the review process.

Lucknow, India
Bhubaneswar, India
Fez, Morocco

Dr. Vikrant Bhateja
Dr. Suresh Chandra Satapathy
Dr. Hassan Satori

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