GUEST EDITORIAL PREFACE

Special Issue on "e-Innovation Challenges in Agriculture, Forestry and Environment" Part A

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Agricultural and Environmental Information Systems are capable of serving the needs of the society in regard to citizens, communities and enterprises while they can supply a wide range of highly appreciated innovative services, techniques, tools, devices and methodologies.

The special issue aims to bring together and to present innovative emerging Information Systems applications in Agriculture, Forestry and Environment. It provides a forum for timely, comprehensive presentation of relevant recent advances in methodologies, theories and applications in ICT for Agriculture, Forestry and Environment aiming to bring together professional, experts and researchers working on Information and Communication Technologies in Agriculture, Forestry, Food and Environment.

Papers included in that special issue aim to provide various multi-discipline approaches to the planning, design, advance, development, and implementation of agricultural and environmental information systems applications, addressing the integration of several domains such as agriculture, agrofood entrepreneurship, agro-investments, tourism, SMEs, supply chain and logistics, e-waste management, forestry and eco-habitats, wild-life protection, education, geology, economics, spatial planning, mathematics, statistics and computer science.

Updated and extended versions of papers presented at the *6th International Conference on Information and Communication Technologies in Agriculture HAICTA 2013* that took place on 20-22nd September 2013 in Corfu, Greece are included in this special issue. HAICTA is a Non-Government Organization and it is the Greek Branch of European Federation for Information Technology in Agriculture (EFITA). The

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international conference was organized with the support of HAICTA branch in Northern and Central Greece and in cooperation with a number of associated institutions, such as the Department of Informatics of the Ionian University in Greece, the Departments of Electrical Engineering and Agricultural Products Marketing and Quality Control of Technological Educational Institute of Western Macedonia, Greece and the University of Macedonia, Greece. The conference received 113 paper submissions by authors coming from 39 countries. The selection of the studies appearing in this special issue was based on the their relevance subject to the scope of the International Journal of Agricultural and Environmental Information Systems and on the evaluation score of the full papers during the double blind peer review process.

The applications described in the papers include applied agricultural and environmental information systems based on network technologies, cloud computing, rural broadband, multimedia and image processing, e-learning, e-commerce, e-readiness, spatial decision making, Geographic Information Systems (GIS), fuzzy logic algorithms and many other emerging techniques in an attempt to innovatively support sustainable development in agriculture, in well-being of the society, in green development, in regional planning and in the protection of the environment.

The special edition presents nine papers, which deal with an extensive range of topics, while all the papers propose some innovative approach. The special edition will be presented in two parts, Part A and Part B.

Part A (JAEIS 6-1) includes papers 1 to 4 while Part 2 (IJAEIS 6-2) includes papers 5 to 9.

In detail, in Part A:

In Paper 1 is discussed the difference in the e-readiness and developing of education programs in agricultural informatics aiming to reduce the digital gaps in agriculture and rural areas, the usage of network services are evaluated on two regional levels and also educational tools which could increase the e-readiness of SMEs and principally aid agricultural enterprises are presented.

In Paper 2 is presented the innovative topic of cloud computing and its exploitation in supply chain management issues.

In Paper 3 is approached the important and contemporary issue of e- waste, with an extensive literature review and within the logistics aspect.

In Paper 4 are extensively described issues such as e-commerce potentials in the fast food industries, the acceptance of e-commerce alternatives by the consumers and the collaboration between businesses and customers, while is examined the industries' use of electronic ordering, their experiences on the deployment of e-commerce technologies, consumers' views and factors affecting the use of those distribution channels.

In detail, in Part B:

In Paper 5 is presented a GIS-based application using thematic maps aiming to assess the relationship between geological background and habitats of mushrooms, taking into consideration geological formations, elevation, ecosystems and land use.

In Paper 6, an image process topic used in animal protection is described, concerning monitoring of animals and discusses the presentation of an innovative framework for the image quality assessment (QA), and moreover, about the filtering of outliers, in an image-based animal supervision system (asup).

In Paper 7 is discussed the agro-food processing sector in order to focus on efficiency, exportability, and competitiveness issues covering the period before and after the financial crisis in Greece by using Data Envelopment Analysis - DEA technical efficiency scores for the measurement of firms' efficiency.

In Paper 8 are explored cutting edge methodologies that attempt to achieve some useful relationships through association rules and fuzzy correlation rules using bio-statistical techniques. The newly proposed algorithm is utilized for seeking close associations and relationships between a group of plant species clustering around Sandalwood in Pachaimalai hills, Eastern Ghats, Tamilnadu.

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Finally, in Paper 9 is attempted to link as a part of a further analysis, the agro-industrial investments with the tourism developmental dynamics based on location decisions of agro-industrial investments in Greece, driven by a unifying rationale, aspiring to introduce a research field that is oriented to the integration of the factors affecting the economy of the country.

The nine papers as presented above in Parts A & B of the special issue on e-innovation challenges in Agriculture, Forestry and Environment, represent some of the latest and most promising attempts to employ innovative ICT and computer techniques in the field of Agriculture, Forestry and Environment, which is vital for the sustainability of the society, especially during global economic crisis. We are confident that this special issue will stimulate further research in this area and will advance to new directions and solutions that can lead to both theoretical and practical insight and applications.

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IJAEIS

Zacharoula Andreopoulou is an Assistant Professor in the Laboratory of Forest Informatics (2007- now) at the Department of Forestry and Natural Environment of Aristotle University of Thessaloniki. She holds a BSc in Mathematics (1987), a BSc degree in Forestry and Natural Environment (1995) and a PhD degree in Forest Informatics (2000), all from Aristotle University of Thessaloniki. She teaches courses on networks and internet services, databases and software programming with focus on the environment and sustainable development. Her scientific and research interests include networks and web services, databases, green informatics, modeling and ICT adoption for the sustainability of natural resources and environment, sustainable development and regional development applications. She is an active member of scientific societies and she has organized and participated many international and domestic conferences. She has authored and edited books regarding Environmental Informatics and ICT adoption for sustainable development; member of Editorial Boards. Her papers are included in various international Journals. She is also a reviewer, executive editor and associate editor in international Journals.

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