

EDITORS IN CHIEF

Sigeru Omatu*Osaka Institute of Technology, Japan***Juan M. Corchado***University of Salamanca, Spain*

EDITORIAL ASSISTANT

Sara Rodríguez González*University of Salamanca, Spain***Inés Sitton Candanedo***University of Salamanca, Spain***Roberto Casado Vara***University of Salamanca, Spain***Elena Hernández Nieves***University of Salamanca, Spain*

ASSOCIATE EDITORS

Andrew CAMPBELL, *Dartmouth College, Hanover, United States***Ajith ABRAHAM**, *Norwegian University of Science and Technology, Norge, Norway***James LLINA**, *State University of New York, New York, United States***Andre PONCE DE LEON F. DE CARVALHO**, *Universidade do Sao Paulo, Sao Paulo, Brazil***Juan PAVÓN**, *Universidad Complutense de Madrid, Madrid, Spain***José Manuel MOLINA**, *Universidad Carlos III de Madrid, Madrid, Spain***Kasper HALLENBORG**, *Syddansk Universitet, Odense M, Denmark***Tiancheng LI**, *University of Salamanca, Spain***S.P. Raja**, *Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai (India)***eISBN: 2255-2863****Volume 10, number 1**

BISITE Research Group

University of Salamanca, 2021

SCIENTIFIC COMMITTEE

Choong Yeun LIONG, *University Kebangsaan Malaysia, Bangi, Malaysia***Cristian Iván PINZÓN TREJOS**, *Universidad Tecnológica de Panamá, Panamá, Panama***Eloi BOSSE**, *Université Laval, Québec, Canada***Yves DEMAIZEAU**, *Laboratoire d'Informatique de Grenoble, Grenoble, France***Estevam HRUSCHKA**, *Universidade Federal de São Carlos, Sorocaba, Brazil***Eugenio OLIVEIRA**, *Universidade do Porto, Porto, Portugal***Flavia DELICATO**, *Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil***Florentino FDEZ-RIVEROLA**, *Universidade de Vigo, Spain***Goreti MARREIROS**, *Universidade Politecnica do Porto, Porto, Portugal***Habib FARDOUM**, *Universidad de Castilla-La Mancha, Ciudad Real, Spain***Jaderick PABICO**, *University of the Philippines Los Baños, Laguna, Philippines***Jairo Vélez BEDOYA**, *University of Caldas (Colombia)***Joao GAMA**, *Universidade do Porto, Porto, Portugal***José Antonio CASTELLANOS GARZÓN**, *University of Salamanca, Spain***Luis Fernando CASTILLO**, *University of Caldas, Colombia***Kazumi NAKAMATSU**, *University of Hyogo, Hyogo, Japan***Kazutoshi FUJIKAWA**, *Nara Institute of Science and Technology, Nara, Japan***Luis LIMA**, *Universidade Politecnica do Porto, Porto, Portugal***Luis CORREIA**, *Universidade do Lisboa, Lisbon, Portugal***Maruthi Rohit AYYAGA RI**, *University of Dallas (USA)***Paulo NOVAIS**, *Universidade do Minho, Braga, Portugal***Pawel PAWLEWSKI**, *Poznan University of Technology, Poznan, Poland***Philippe MATHIEU**, *Université Lille, Lille, France***Radel BEN-AY**, *Jerusalem College of Engineering, Jerusalem, Israel***Radu-Daniel VATAVU**, *Stefan cel Mare University, Suceava, Romania***Ricardo COSTA**, *Universidade Politecnica do Porto, Porto, Portugal***Rui JOSÉ**, *Universidade do Minho, Braga, Portugal***Roberto CASADO**, *University of Salamanca, Spain***Seyedsaeid MIRKAMALI**, *University of Mysore, Mysuru, India***Subrata DAS**, *Machine Analytics, Inc., Boston, United States***Sumit GOYAL**, *National Dairy Research Institute, Karnal, India***Soon Ae CHUNCITY**, *University of New York, New York, United States***Sylvain GIROUX**, *Université de Sherbrooke, Sherbrooke, Canada***Swati NAMDEV**, *Career College, Bhopal, India***Tina BALKE**, *University of Surrey, Guildford, United Kingdom***Veikko IKONEN**, *Teknologian tutkimuskeskus VTT, Espoo, Finland***Vicente JULIÁN**, *Universidad Politécnica de Valencia, Valencia, Spain***Yi FANG**, *Purdue University, Lafayette, United States***Zbigniew PASEK**, *IMSE/University of Windsor, Windsor, Canada***Giancarlo FORTINO**, *Università della Calabria, Arcavacata, Italy***Amparo ALONSO BETANZOS**, *Universidad de A Coruña, A Coruña, Spain***Franco ZAMBONELLI**, *Università de Modena e Reggio Emilia, Modena, Italy***Rafael CORCHUELO**, *Universidad de Sevilla, Sevilla, Spain***Michael N. HUHNS**, *University of South Carolina, Columbia, United States***Stefano CORALUPPI**, *Compunetix, Inc., Monroeville, United States***Javier PRIETO TEJEDOR**, *University of Salamanca, Spain***Yeray MEZQUITA**, *University of Salamanca, Spain***David GARCÍA**, *University of Salamanca, Spain***Ricardo SILVEIRA**, *Universidade Federal de Santa Catarina, Brazil***Ricardo S. ALONSO**, *University of Salamanca, Spain***José Luis POZA**, *Universitat Politècnica de València, Spain***Ankur SINGH BIST**, *Sri Venkateswara University, India***Javier PARRA**, *University of Salamanca, Spain***Maria Eugenia PÉREZ-PONS**, *University of Salamanca, Spain*

ADVANCES IN DISTRIBUTED COMPUTING AND ARTIFICIAL INTELLIGENCE

<https://adcaij.usal.es>