

## Editor-in-Chief

**Prof. Min-Shiang Hwang**

Department of Computer Science & Information Engineering, Asia University, Taiwan

## Publishing Editors

**Candy C. H. Lin**

## Board of Editors

---

### **Saud Althuniba**

Department of Communications Engineering of Al-Hussein Bin Talal University (Jordan)

### **Jafar Ahmad Abed Alzubi**

College of Engineering, Al-Balqa Applied University (Jordan)

### **Majid Bayat**

Department of Mathematical Sciences and Computer, University of Kharazmi (Iran)

### **Yu Bi**

University of Central Florida (USA)

### **Mei-Juan Chen**

National Dong Hwa University (Taiwan)

### **Chen-Yang Cheng**

National Taipei University of Technology (Taiwan)

### **Yung-Chen Chou**

Department of Computer Science and Information Engineering, Asia University (Taiwan)

### **Christos Chrysoulas**

University of Patras (Greece)

### **Christo Dichev**

Winston-Salem State University (USA)

### **Xuedong Dong**

College of Information Engineering, Dalian University (China)

### **Mohammad GhasemiGol**

University of Birjand (Iran)

### **Dariusz Jacek Jakobczak**

Department of Electronics and Computer Science, Koszalin University of Technology (Poland)

### **N. Muthu Kumaran**

Electronics and Communication Engineering, Francis Xavier Engineering College (India)

### **Andrew Kusiak**

Department of Mechanical and Industrial Engineering, The University of Iowa (USA)

### **John C.S. Lui**

Department of Computer Science & Engineering, Chinese University of Hong Kong (Hong Kong)

### **Gregorio Martinez**

University of Murcia (UMU) (Spain)

### **Sabah M.A. Mohammed**

Department of Computer Science, Lakehead University (Canada)

### **Lakshmi Narasimhan**

School of Electrical Engineering and Computer Science, University of Newcastle (Australia)

### **Khaled E. A. Negm**

Etisalat University College (United Arab Emirates)

### **S. R. Boselin Prabhu**

SVS College of Engineering (India)

### **Antonio Pescapè**

University of Napoli "Federico II" (Italy)

### **Rasoul Ramezani**

Sharif University of Technology (Iran)

### **Hemraj Saini**

Jaypee University of Information Technology (India)

### **Michael Sheng**

The University of Adelaide (Australia)

### **Yuriy S. Shmaliy**

Electronics Engineering, Universidad de Guanajuato (Mexico)

### **Tony Thomas**

School of Computer Engineering, Nanyang Technological University (Singapore)

### **Mohsen Toorani**

Department of Informatics, University of Bergen (Norway)

### **Chia-Chun Wu**

Department of Industrial Engineering and Management, National Quemoy University (Taiwan)

### **Nan-I Wu**

Toko University (Taiwan)

### **Cheng-Ying Yang**

Department of Computer Science, University of Taipei (Taiwan)

### **Chou-Chen Yang**

Department of Management of Information Systems, National Chung Hsing University (Taiwan)

### **Sherali Zeadally**

Department of Computer Science and Information Technology, University of the District of Columbia (USA)

### **Jianping Zeng**

School of Computer Science, Fudan University (China)

### **Justin Zhan**

School of Information Technology & Engineering, University of Ottawa (Canada)

### **Yan Zhang**

Wireless Communications Laboratory, NICT (Singapore)

## PUBLISHING OFFICE

### **Min-Shiang Hwang**

Department of Computer Science & Information Engineering, Asia University, Taichung 41354, Taiwan, R.O.C.

Email: [mshwang@asia.edu.tw](mailto:mshwang@asia.edu.tw)

International Journal of Electronics and Information Engineering is published both in traditional paper form (ISSN 2313-1527) and in Internet (ISSN 2313-1535) at <http://ijeie.jalaxy.com.tw>

### **PUBLISHER: Candy C. H. Lin**

© Jalaxy Technology Co., Ltd., Taiwan 2005  
23-75, P.O. Box, Taichung, Taiwan 40199, R.O.C.