SAKARYA UNIVERSITY
JOURNAL OF COMPUTER
AND
INFORMATION SCIENCES

i

Fatma Akalın
Image Processing, Data Mining and Knowledge
Discovery
Sakarya University
Sakarya - Türkiye

Nur Yasin Peker
Information and Computer Sciences, Image Processing
Sakarya Applied Sciences University
Sakarya - Türkiye

Aref Yelghi
Department of Computer Engineering
Istanbul Topkapı University
Istanbul - Türkiye

Kevser Ovaz Akpınar
Information and Computer Sciences
Rochester Institute of Technology Dubai
United Arab Emirates

Mohiuddin Ahmed
Computer and Security Department
Edith Cowan University
Australia

Maysaa Salama
Information and Computer Sciences
Sakarya University
Sakarya - Türkiye

İbrahim Delibaşoglu
Image Processing, Machine Learning, Artificial
Intelligence, Computer Software
Sakarya University
Sakarya - Türkiye

Deniz Balta
Information and Computer Sciences, Knowledge
Representation and Reasoning
Sakarya University
Sakarya - Türkiye

Volkan Müjdat Tiryaki
Informatics Institute
Istanbul Technical University
Istanbul - Türkiye

Christof Defryn
Department of Engineering Management
University of Antwerp
Belgium

Sunusi Bala Abdullahi
Department of Information Systems Engineering
Sakarya University
Sakarya - Türkiye

Hüseyin Demirci
Department of Information Systems Engineering
Sakarya University
Sakarya - Türkiye

Michell Queiroz
Computer Software
Technical University of Denmark
Denmark

Language Editors

A F M Suaib Akhter
Information Security Management, Network and
Communication
Sakarya Applied Sciences University
Sakarya - Türkiye

Seçkin Arı
Department of Computer Engineering
Sakarya University
Sakarya - Türkiye

Layout Editor

Mehmet Emin Çolak
Scientific Journals Coordinatorship
Sakarya University
Sakarya-Türkiye
mehmetcolak@sakarya.edu.tr

Yakup Beriş
Scientific Journals Coordinatorship
Sakarya University
Sakarya-Türkiye
yakupberis@sakarya.edu.tr

Indexing & Abstracting & Archiving

Scopus®

DOAJ

ULAKBİM
TRDİZİN

EBSCO Central & Eastern European Academic Source

Applied Science & Technology Source

SHERPA/RoMEO

Contents

Reviews